125-260

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1887.

No. 163.

THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY,
PLAINTIFF IN ERROR,

vs.

THE MISSOURI RIVER PACKET COMPANY.

IN ERROR TO THE SUPREME COURT OF THE STATE OF MISSOURI.

FILED OCTOBER 29, 1884.

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a UNITED STATES OF AMERICA, *ss:*

{Seal of the United States Circuit Court, Eastern Division, for the Western District of Missouri.}

The President of the United States to the honorable the judges of the supreme court of the State of Missouri, Greeting:

Because in the record and proceedings as also in the rendition of the judgment of a plea which is in the said Supreme Court before you, at the October term, 1883, thereof, between the Missouri River Packet Company, plaintiff, and The Hannibal and St. Joseph Railroad Company, defendant, a manifest error hath happened, to the great damage of the said Hannibal and St. Joseph Railroad Company, as by its complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, at Washington, D. C., together with this writ, so that you have the same at Washington, D. C., on the second Monday of October next, in the said Supreme Court to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws and customs of the United States should be done.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this 21st day of December, in the year of our Lord one thousand eight hundred and eighty-three.

Issued at office, in the city of Jefferson, with the seal of the circuit court of the United States for the western district of Missouri, dated as aforesaid.

H. C. GEISBERG,
Clerk Circuit Court United States, Western District of Missouri.

Allowed by—
WARWICK HOUGH,
Chief Justice of the Supreme Court of Missouri.

b [Endorsed:] No. —. United States circuit court, western district of Missouri. —— —— *vs.* —— ——. Writ of error to the — court of the — of Missouri. Returned and filed — day of ——, 188–. —— ——, clerk. Dec. 22.

Return to Writ.

UNITED STATES OF AMERICA, *Western District of Missouri,* } *ss:*

In obedience to the command of the within writ I herewith transmit to the Supreme Court of the United States a duly certified tran-

script of the record and proceedings in the within-entitled case, together with all things concerning the same.

In witness whereof I hereto subscribe my name and affix the seal of said supreme court, at the city of Jefferson, this 20th day of Sept., A. D. 1884.

[Seal of the Supreme Court of Missouri.]

HENRY W. EWING, *Clerk*,
By E. B. EWING, *D. C.*

c The United States of America to the Missouri River Packet Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States to be holden at Washington, D. C., on the second Monday of October next, pursuant to a writ of error filed in the clerk's office of the supreme court of the State of Missouri, wherein The Hannibal & St. Joseph Railroad Company is plaintiff in error and you are defendant in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Warwick Hough, chief justice of the supreme court of the State of Missouri, this 21st day of December, in the year of our Lord one thousand eight hundred and eighty-three.

WARWICK HOUGH,
Chief Justice of the Supreme Court of Missouri.

d [Endorsed:] United States — court, western district of Missouri. —— —— *vs.* —— ——. Citation. Filed ——, 188–. —— ——, clerk. Dec. 22.

UNITED STATES OF AMERICA, *Western District of Missouri,* } *ss:*

I hereby acknowledge due service of the within citation this 3d day of July, A. D. 1884.

JOHN C. GAGE,
Attorney for Defendant in Error.

e STATE OF MISSOURI, *sct:*

Be it remembered that heretofore, to wit, on the 18th day of April, A. D. 1878, there was filed in the office of the clerk of the supreme court of the State of Missouri a transcript, which is in the words and figures as follows, to wit:

1 Be it remembered that heretofore, to wit, on the 20th day February, A. D. 1875, there was filed in the office of the clerk of the circuit court of Jackson county, at the city of Independence, Mo., a certain petition, which is in words and figures following, to wit:

In the Circuit Court of Jackson County, State of Missouri, at Independence. March Term, A. D. 1875.

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
against
THE HANNIBAL AND ST. JOSEPH RAILROAD CO., Def't.

Plaintiff states that it is, and for the five years last past has been, a corporation organized and created under and by virtue of the laws of the State of Missouri, and during said period has been and still is the owner and proprietor of numerous steamboats, including the steamboat named "Alice," hereinafter mentioned, with which it has, as such corporation, during said period been engaged in nav-
2 igating the waters of the Missouri river and conveying and transporting by means thereof passengers and freight between the various towns and cities situated on the banks of said river in the States of Missouri and Kansas.

That the defendant is, and for the last twenty years has been, a railroad corporation, organized under and by virtue of the laws of the State of Missouri.

That the Missouri river, for a long distance above the city of Kansas, in the county of Jackson and State of Missouri, and below said city to the mouth of said river, is a navigable stream; that prior to the fourth day of March, 1874, the defendant had erected, and prior thereto and on said day did keep and maintain, in the said river and the channel thereof, near the southern bank thereof and near the foot of the street known as Broadway, in said city of Kansas, a certain structure composed of heavy timbers and lumber fastened together; and long prior to said day the defendant had and erected, kept
3 and maintained, and did on said day keep and maintain, in the channel of said river, in a point in said Jackson county and opposite said city of Kansas, nearer the center of said river than the structure first above named, a certain other structure, to wit, a crib or box built of heavy timbers filled with stone, which said crib or box extended from the bed of said river upward to a height of thirty feet or more above the surface thereof; that both of said structures were and always have been obstacles in the way of vessels passing by the same up and down said river, and have prevented and rendered the navigation of said river dangerous and unsafe; that said structures were so erected, kept, and maintained by the defendant wrongfully, willfully, and in flagrant disregard and violation of the rights of plaintiff and others to the free and unobstructed use of said river as a highway of commerce; that before the
4 erection of said structures the current of said river at and above and below the point where the same were located and erected had been in a line nearly parallel to the faces of said structure, and the navigation of the same easy and safe.

But plaintiff states that the structure first above mentioned had, on said fourth day of March, 1874, caused the current of the river at that point to change so that it washed with great velocity from the point of the location of said structure in a direction nearly at right angles to its former course towards and against said crib or box.

And plaintiff states that on said fourth day of March, 1874, it was, in the course of its business, navigating said river with its said steamboat "Alice," and while attempting, in the exercise of due care and caution, to run said boat by and between said structure said boat was, without any fault of this plaintiff, by the current of the river, so changed as aforesaid, hurled violently against said crib or
5 box, and the water-wheel, wheel-house, and other parts of said boats broken, injured, and damaged.

That plaintiff was compelled to and did expend large sums of money in repairing said injuries to said boat, and was, on account of the injuries thereto, wholly deprived of the use of the same and of the earnings thereof for the period of thirteen days, to plaintiff's damage in the sum of twenty-five hundred dollars, for which, with interest from the first day of April, 1874, plaintiff prays judgment against the defendant.

2. For a second and further cause of action plaintiff states that it is, and for the five years last past has been, a corporation created and organized under and by virtue of the laws of the State of Missouri, and during said period has been and still is the owner and proprietor of numerous steamboats (including the steamboat named "St. Luke," hereinafter mentioned), with which it has as such corporation during said period been engaged in navigating the waters of the Missouri river and carrying and transporting by means thereof passengers and freight between the various towns and
6 cities situated on the banks of said river in the States of Missouri and Kansas.

That the defendant is, and for the last twenty years has been, a railroad corporation organized under and by virtue of the laws of the State of Missouri.

That the Missouri river for a long distance above the city of Kansas, in the county of Jackson and State of Missouri, and below said city to the mouth of said river is a navigable stream.

That prior to the fifteenth day of September, 1874, the defendant had erected, and prior thereto and on said day did keep and maintain in the said river and the channel thereof, near the southern bank thereof and near the foot of the street known as Broadway, in said city of Kansas, a certain structure composed of heavy timbers and lumber fastened together, and long prior to said day the defendant had erected, kept, and maintained, and did on said day keep and maintain in the channel of said river at a point in said Jackson county and opposite said city of Kansas, nearer the centre of said river than the structure first above-named, a certain other structure, to wit, a crib or box extended from the bed of said river up-
7 ward a height of thirty feet or more above the surface thereof.

That both of said structures were and always have been obstacles in the way of vessels passing by the same up and down said river, and have prevented and rendered the navigation of said river dangerous and unsafe.

That said structures were so erected, kept, and maintained by the defendant wrongfully, willfully, and in flagrant disregard and vio-

lation of the rights of plaintiff and others of the free and unobstructed use of said river as a highway of commerce.

That before the erection of said structures the current of said river at and above and below the points where the same were located and erected had been in a line nearly parallel to the faces of said structures and the navigation of the same easy and safe; but plaintiff states that the structure first above mentioned had on said 15th day of September, 1874, caused the current of the river at that point to change so that it rushed with great velocity from the point of the location of said structure in a direction nearly at right
8 angles to its former course towards and against said crib or box.

And plaintiff states that on said 15th day of September, 1874, it was in the course of its business navigating said river with its said steamboat "St. Luke," and while attempting, in the exercise of due care and caution, to run said boat by and between said structures said boat was, without any fault of this plaintiff, by the current of said river, so changed as aforesaid, hurled violently against said crib or box and broken, injured, and damaged.

That plaintiff was compelled to and did expend large sums of money in repairing the said damage and injuries to said boat, and was on account of the injuries thereto wholly deprived of the use of the same and of the earnings thereof for the space of eleven days, to the plaintiff's damage in the sum of three thousand dollars, for which, with interest from the first day of October, 1874, plaintiff prays judgment against defendant.

GAGE & LADD,
Att'ys for Plaintiff.

And upon the filing of said petition a writ of summons was issued, which was returned served by the sheriff of Jackson county on the 20th day of February, 1875.

9 And afterwards, at the March term, A. D. 1875, of our said circuit court, the defendant filed its plea to the jurisdiction of the court in this cause, and which plea to the jurisdiction of the court is as follows, to wit:

In the Circuit Court, Jackson County, State of Missouri, at Independence. March Term, A. D. 1875.

THE MISSOURI RIVER PACKET COMPANY, Plaintiff,
against
THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, Defendant.

The said defendant, by its attorney, comes and says that the court ought not to have or take further cognizance of the above-entitled cause, because it says that the supposed causes of action and each of them, in the plaintiff's petition filed in said cause, accrued to the plaintiff out of the jurisdiction of this court; that the Missouri river described in said petition was, at the time therein alleged and still is, navigable from the sea to and for a long distance above the city

of Kansas, on said river, by vessels of ten tons or more burden; that under and by authority of an act of Congress entitled "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25th, 1866, and in pursuance
10 of authority conferred upon the Kansas City and Cameron Railroad Company by an act of the General Assembly of the State of Missouri entitled "An act to amend an act entitled an act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company, approved February 9th, 1857," approved March 11th, 1867, said Kansas City and Cameron Railroad Company constructed a bridge across said river at the city of Kansas between the date of the passage of said act and the 4th day of July, 1869; that by authority of said last-mentioned act said Kansas City and Cameron Railroad Company was, on the 14th day of February, 1870, consolidated with the defendant, and the defendant, by virtue of said consolidation, became the owner of said bridge; that the structures and each of them described in plaintiff's petition and therein complained of were, at the time of the several injuries alleged in said petition and still are, a part of said bridge; that said bridge was wholly situated, at the time of the injuries alleged in said petition and still is wholly situated, within the jurisdiction of the district court of the United States within and for the western district of Missouri. Defendant avers that by *the* reason of the premises said district court of the United States within and for the western district of Missouri has exclusive jurisdiction over the subject-matter of said suit, and
11 this the defendant is ready to verify. Wherefore it prays judgment whether this court can or will take further cognizance of the action aforesaid.

JAMES CARR,
Att'y for Defendant.

And which plea was by the court, at the September term, 1875, overruled. Thereupon, afterwards, at the September term, 1875, of said court, and on the 21st day of September, 1875, defendant filed its answer, and which is as follows, to wit:

In the Circuit Court of Jackson County, Missouri, at Independence.
September Term, A. D. 1875.

THE MISSOURI RIVER PACKET COMPANY, Plaintiff,
vs.
THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, Defendant.

Defendant, for answer to the first count or cause of action stated in the plaintiff's petition filed in the above-entitled cause, denies each and all the material allegations in said count.

Defendant, for a second and further defence to the pretended cause of action alleged in said court, states that at the time of the
12 injury complained of it was, for a long time prior thereto had been, and still is, a corporation created and organized under an act of the General Assembly of the State of Missouri entitled "An act to incorporate the Hannibal and St. Joseph Railroad Com-

pany," approved February the 16th, 1847, and the several acts amendatory thereof; that the defendants, under and by authority of its charter, was authorized to survey, mark out, locate, construct, maintain, and operate a railroad from the town of Hannibal, in the State of Missouri, to the town of St. Joseph, in said State; that under and by authority of said charter defendant many years ago did survey, mark out, locate, and construct said railroad, and has been ever since and still is maintaining and operating said railroad.

That under and by authority of an act of the General Assembly of the State of Missouri entitled "An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company," approved February 9th, 1857, there was thereby created a corporation known as the Kansas City, Galveston and Lake Superior Railroad Company, and the several acts amendatory thereof; that the name of the said company was afterwards changed to the Kansas City and Cameron Railroad Company.

13 That said latter company was authorized by its charter to survey, mark out, locate, construct, maintain, and operate a railroad from the city of Kansas, in Jackson county, Missouri, north to the north boundary of said State in the direction of Fond du Lac, on Lake Superior.

That said company did survey, mark out, and construct the Kansas City and Cameron railroad from the north bank of the Missouri river opposite to said city of Kansas to Cameron, on the Hannibal and St. Joseph railroad; that under and by authority of an act of the General Assembly of the State of Missouri, entitled "An act to incorporate the Kansas City Bridge Company," approved February 20th, 1865, there was conferred on the corporation therein named the exclusive right and privilege of constructing a railroad at or near the city of Kansas over and across the Missouri; that the corporation named in said last-mentioned act never organized under or accepted the said act; that under and by authority of an act of the General Assembly of the State of Missouri, entitled "An act to amend an act entitled 'An act to incorporate the Kansas City, Gal-

14 veston and Lake Superior Railroad Company,'" approved February 9th, 1857, approved March 11th, 1867, the same authority, rights, and powers were conferred upon said Kansas City and Cameron Railroad Company to erect and maintain a railroad bridge, and in connection therewith to erect and maintain a bridge for the passage of teams and foot passengers over and across the Missouri river at or near said city of Kansas as had been conferred upon said Kansas City Bridge Company; that under and by authority of an act of Congress entitled "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25th, 1866, said Kansas City and Cameron Railroad Company was authorized to construct and maintain a bridge over and across the Missouri river at said city of Kansas, and to lay on and over said bridge railway tracks for the more perfect connection of any railroads that were then or might be thereafter constructed to the said river at or opposite said point; that under and by authority of said acts of the General Assembly of the State of Missouri and said

act of Congress said Kansas City and Cameron Railroad Company,
between the time of the passage of said last-mentioned act
15 and the 4th day of July, A. D. 1869, constructed a bridge
over and across the Missouri river at said city of Kansas, and laid on and over said bridge railway tracks for the more perfect connection of any railroads that then were or should thereafter be constructed to said Missouri river at or opposite said point where said bridge was constructed as aforesaid, and said bridge was also constructed for the passage of teams, carriages, and foot passengers thereon; that said bridge was and is a pivot drawbridge, with a draw over the main channel of said Missouri river at an accessible and navigable point, and with spans of 160 feet in length in the clear and on each side of the pivot pier of the draw, and the next adjoining spans to the draw were and are 250 feet, and said spans were and are 30 feet above low-water mark and 10 feet above high-water mark, measuring to the bottom chord of said bridge, and the piers of said bridge were at the time of the location and construction thereof parallel with the current of said river.

That said Kansas City and Cameron Railroad Company
16 maintained said bridge constructed as aforesaid from the
time of the completion thereof, as aforesaid, until the 14th day of February, A. D. 1870, when said Kansas City and Cameron Railroad Company was under and by authority of said act of the General Assembly of the State of Missouri entitled "An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company, approved February 9th, 1857," approved March 11th, 1867, consolidated with defendant, and defendant in and by said consolidation became the absolute owner of the Kansas City and Cameron railroad and said bridge erected by said Kansas City and Cameron Railroad Company as aforesaid, and entitled to all the rights, privileges and franchises which said Kansas City and Cameron Railroad Company had in and to said railroad and bridge, and defendant, under and by virtue of the authority aforesaid, has maintained and still maintains said bridge over and across the Missouri river at said point as aforesaid.

That the obstacles and structures described in said count and each
of them were at the time alleged in said — and still are parts
17 and parcels of said bridge, and were at the time alleged in
said count and still are necessary to the safe and secure maintainance of said bridge.

That since the completion of said bridge as aforesaid two other railroads, besides said Kansas City and Cameron railroad, have been completed to said Missouri river at or opposite to the points where said bridge has been constructed on the north side of said river, to wit, the St. Louis, Kansas City and Northern railway, running from the city of St. Louis, in the State of Missouri, to said bridge, and the Kansas City, St. Joseph and Council Bluffs railroad, running from Council Bluffs, in the State of Iowa, to said bridge.

That defendant and each of the railroad companies owning and operating said other railroads are common carriers of passengers and property and carry and transport a large number of passen-

gers and property over said bridge. The said bridge has been ever since the completion thereof and still is a post route. Defendant avers that by means of the premises said bridge has been ever since its completion and still is a lawful structure, and if plaintiff
18 has sustained any damage in consequence thereof it has been without any fault on the part of defendant and the defendant is not legally liable therefor.

Defendants therefor- sets up and pleads the foregoing as a full and complete bar to the cause of action alleged in said count.

Defendant, for answer to the second count or cause of action stated in the plaintiff's petition filed in the above-entitled cause, denies each and all the material allegations in said count.

Defendant, for a second and further defense to the pretended cause of action alleged in said count, state- that at the time of the injury complained of it was, for a long time prior thereto had been, and still is, a corporation created and organized under an act of the General Assembly of the State of Missouri, entitled An act to incorporate the Hannibal and St. Joseph Railroad Company, approved February 16th, 1867, and the several acts amendatory thereof; that the defendant, under and by authority of its charter, was authorized to survey, mark out, locate, construct, maintain, and operate a railroad from the town of Hannibal, in the State of Missouri, to
19 the town of St. Joseph, in said State.

That under and by authority of said charter defendant many years ago did survey, locate, mark out, and construct said railroad, and has been ever since and still is maintaining and operating said railroad.

That under and by authority of an act of the General Assembly of the State of Missouri, entitled An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company, approved February 9th, 1857, there was thereby created a corporation known as the Kansas City, Galveston and Lake Superior Railroad Company, and the several acts amendatory thereof.

That the name of said company was afterward changed to that of the Kansas City and Cameron Railroad Company; that said latter company was authorized by its charter to survey, mark out, locate, construct, maintain, and operate — railroad from the city of Kansas, in Jackson county, Missouri, north to the north boundary of said State in the direction of Fond du Lac, on Lake Superior; that said company did survey, mark out, locate, and construct the Kansas City and Cameron railroad from the north bank of the Missouri
20 river opposite to said city of Kansas to Cameron on the Hannibal and St. Joseph railroad; that under and by authority of an act of the General Assembly of the State of Missouri entitled "An act to incorporate the Kansas City Bridge Company," approved February 20th, 1865, there was conferred on the corporators therein named the exclusive right and privilege of constructing a railroad bridge, at or near the city of Kansas, over and across the Missouri river; that the corporators named in said last-mentioned act never organized under or accepted the said act.

That under and by authority of an act of the General Assembly

of the State of Missouri entitled "An act to amend an act entitled 'An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company,'" approved February 9th, 1857, approved March 11th, 1867, the same authority, right, and powers were conferred upon said Kansas City and Cameron Railroad Company to erect and maintain a railroad bridge, and in connection therewith to erect and maintain a bridge for the passage of teams, carriages, and foot passengers over and across the Missouri river at or near the said city of Kansas as had been conferred upon said Kansas City Bridge Company.

21 That under and by authority of an act of Congress entitled "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25th, 1866, said Kansas City and — Railroad Company was authorized to construct and maintain a bridge over and across the Missouri river at said city of Kansas and to lay on and over said bridge railway tracks for the more perfect connection of any railroads that then were or might thereafter be constructed to the said river at or opposite said point.

That under and by authority of said act of the General Assembly of the State of Missouri and said act of Congress said Kansas City and Cameron Railroad Company, between the time of the passage of the said last-mentioned act and the 4th day of July, A. D. 1869, constructed a bridge over and across the Missouri at said city of Kansas and laid on and over said bridge railway tracts for the more perfect connection of any railroads that then were or should be thereafter constructed to said Missouri river at or opposite said point where said bridge was constructed as aforesaid, and said bridge was also constructed for the passage of teams, carriages, and foot

22 passengers thereon; that said bridge was and is a pivot draw-bridge, with a draw over the main channel of said Missouri river at an accessible and navigable point, and with spans of 160 feet in length in the clear on each side of the pivot pier of the draw, and the next adjoining spans to the draw were and are 250 feet, and said spans were and are thirty feet above low-water mark and ten feet above high-water mark, measuring to the bottom chord of said bridge; the piers of said bridge at the time of the location and construction thereof were parallel with the current of said river.

That Kansas City and Cameron Railroad Company maintained said bridge constructed as aforesaid from the time of the completion thereof as aforesaid until the 14th day of February, 1870, when said Kansas City and Cameron Railroad Company were under and by authority of said act of the General Assembly of the State of Missouri entitled "An act to amend an act entitled 'An act to incorporate the Kansas City, Galveston, and Lake Superior Railroad Company,' approved February 9th, 1857," approved March 11th, 1867, consolidated with defendant, and defendant in and by said consolida-

23 tion became the absolute owner of said Kansas City and Cameron railroad and said bridge erected by said Kansas City and Cameron Railroad Company as aforesaid, and entitled to all the rights, privileges, and franchises which said Kansas City and Cameron Railroad Company had in and to said railroad and bridge,

and defendant, under and by virtue of the authority aforesaid, has maintained and still so maintains said bridge over and across the Missouri at said point as aforesaid; that the obstacles and obstructions described in said count and each of them were at the time alleged in said count and still are parts and parcels of said bridge, and were at the time alleged in said count and still are necessary to the safe and secure maintainance of said bridge.

That since the completion of said bridge, as aforesaid, two other railroads besides the Kansas City and Cameron railroad have been completed to said Missouri river at or opposite to the point where said bridge has been constructed on the north side of said river, to wit, the St. Louis, Kansas City and Northern railway, running
24 from the city of St. Louis, in the State of Missouri, to said bridge, and the Kansas City, St. Joseph and Council Bluffs railroad, running from Council Bluffs, in the State of Iowa, to said bridge.

That defendant and each of the railroad companies owning and operating said other railroads are common carriers of passengers and property and carry and transport a large number of passengers and property over said bridge, and said bridge has been ever since the completion thereof and still is a post route.

Defendant avers that by means of the premises said bridge has been ever since its completion and still is a lawful structure, and if plaintiff has sustained any damages in consequence thereof it has been without any fault on the part of defendant, and the defendant is not legally liable therefor.

Defendant therefore sets up and pleads the foregoing as a full and complete bar to the cause of action alleged in said count.

JAMES CARR,
Att'y for Defendant.

And be it further remembered that at the regular September term, 1875, of our circuit court, and on the 25th day of
25 September, 1875, plaintiff filed its reply to the answer of defendant; which reply is as follows, to wit:

In the Circuit Court of Jackson County, State of Mo.

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
against
THE HANNIBAL AND ST. JOSEPH RAILROAD CO., Def't.

Plaintiff, for reply to the second defence pleaded to the first count of the petition, admits that the said Kansas City and Cameron Railroad Company did build a bridge at the place mentioned, pretending to build the same under and by authority of the several acts mentioned, but denies that said bridge was constructed according to said acts of the General Assembly and of Congress or either of them; denies that said bridge has spans of 160 f't in length in the clear on each side of the pivot pier of the draw, or that the next adjoining spans are 250 feet, or that the piers of said bridge were at the time of the location or construction thereof or are parallel with the cur-

rent of the river; admits that the defendant has maintained
26 and still maintains said bridge, but denies that it so maintains the same under the authority of any of the acts mentioned.

Plaintiff denies that the obstacles and structures described in said count or any of them were at the time mentioned or still are parts or parcels of said bridge, or that they are or ever were necessary to the safe or secure maintainance thereof.

Plaintiff admits that they were placed near to and in some manner connected with said bridge, but were so erected and maintained in the river by defendant without any authority of law or of any of the acts mentioned and was not parallel to the current of the river.

Plaintiff denies that by means or authority in said defense stated said bridge has ever been or still is a lawful structure, and denies that plaintiff's damage has been maintained without fault of the defendant, or that defendant is not legally liable therefor.

Plaintiff's reply to the second defense pleaded to the second count of the petition admits that the Kansas City and Cameron Railroad Company did construct a bridge at the place mentioned, pretending to build the same under and by authority of the several
27 acts mentioned, but denies that said bridge was constructed according to said acts of the General Assembly and of Congress, or either of them; denies that said bridge has spans of 160 feet in length in the clear on each side of the pivot pier of the draw, or that the next adjoining spans are 250 feet, or that the piers of said bridge were, at the time of the location or construction thereof, or are, parallel with the current of the river; admits that the defendant has maintained and still maintains said bridge, but denies that it so maintains the same under the authority of any of the acts mentioned.

Plaintiff denies that the obstacles and obstructions described in said count or any of them were at the time mentioned or still are parts or parcels of said bridge, or that they are or ever were necessary to the safe or secure maintainance thereof.

Plaintiff admits that they were placed near to and in some manner connected with said bridge, but were so erected and maintained in the river by defendant without any authority of law or any of the acts mentioned, and were not parallel to the current of the river.

Plaintiff denies that by means of anything in said defense
28 stated said bridge has ever been or still is a lawful structure, and denies that plaintiff's damages has been maintained without fault of the defendant, or that defendant is not legally liable therefor.

GAGE & LADD,
For Plaintiff.

And be it further remembered that at the regular September term, A. D. 1877, of our circuit court aforesaid, and on the second day thereof, the same being the 11th day of September, the following, among other, proceedings were had, to wit:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, D'f't. } 8752.

Now, at this day, come again the parties aforesaid, by their respective attorneys, and defendant files her motion to retax the costs of witnesses, John R. Gaunt and Joseph E. Tebeaw, for attendance at the March term, 1877, of our said court, and then the parties announce themselves ready for trial; whereupon come the following jury, to wit, Amos Allen, W. D. Fletcher, Gideon Westervelt, Jno. Deering, John A. Pense, W. J. Hughes, J. H. McMillen, G. G. Manley, W. H. Pollard, Calvin Lowe, John W. Wallace, and
29 Sandy Westmoreland, twelve good and lawful men from the body of the country, who are duly sworn to well and truly try the issues joined and a true verdict render according to the law and evidence, who, after hearing a portion of the evidence, are allowed to separate until to-morrow morning at 9 o'clock, under the usual charge of the court.

And on the third day of our said September term, 1877, the same being the 12th day of September, the following further proceedings were had in this cause:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the parties aforesaid, by their attorneys, and come as well the jury heretofore empanelled, and the trial of this cause is proceeded with, and the jury, after hearing a portion of the evidence, are allowed to separate until to-morrow morning, under the usual charge of the court.

And on the 4th day of our said term, the same being the 13th day of September, the following further proceedings were had in this cause:

30 THE MISSOURI RIVER PACKET COMPANY, Plaintiff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the parties, by their respective attorneys, as well as the jury herein, and the trial of this cause is proceeded with, and the jury, after hearing a part of the evidence, are again allowed to separate until to-morrow morning at 9 o'clock, under the usual charge of the court.

And on the 5th day of our September term aforesaid, the same being the 14th day of September, the following further proceedings were had herein:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the jury and the parties, by their respective attorneys, and the trial of this cause is resumed, and, after hearing a part of the evidence, the jury are allowed to separate until to-morrow morning at 9 o'clock, under the usual charge of the court.

31 And on the 6th day of our said September term aforesaid, the same being the 15th day of September, the following further proceedings were had in this cause:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the parties aforesaid, by their respective attorneys, and come as well the jury herein, and the trial of this cause is proceeded with, and the jury, after hearing all the evidence, instructions of the court, and argument of counsel, retire to their room, and, after due deliberation, return into court the following verdict:

Verdict.

We, the jury, find for the plaintiff and assess its damages on the first count at the sum of twenty-four hundred dollars, $2,400.00.
J. M. WALLACE, *Foreman.*

We, the jury, find on the second count for the plaintiff and assess the damages at twenty-nine hundred dollars, $2,900.00.
J. M. WALLACE, *Foreman.*

32 It is therefore considered by the court, in pursuance of the foregoing verdict, that the plaintiff have and recover of the defendant on the foregoing count of the petition the sum of twenty-four hundred dollars, and that plaintiff have and recover of the defendant on the second count of the petition the sum of twenty-nine hundred dollars, making in the aggregate the sum of five thousand three hundred dollars, together with interest thereon at the rate of six per cent. per annum, as well as costs herein laid out and expended, and have hereof execution; thereupon defendant files its motion to set aside the verdict and judgment thereon and for a new trial.

And be it further remembered that on the 15th day of our said September term, 1877, aforesaid, the same being the 2nd day of October, the following further proceedings were had herein, to wit:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the parties aforesaid, by their respective attorneys,

and the motion for a new trial, &c., heretofore filed being taken up by consent and fully seen and heard by the court, is over-
33 ruled; to which ruling of the court defendant excepts.

And the motion to retax costs heretofore filed being taken up and fully seen by the court is sustained, and the costs are ordered retaxed as prayed; to which ruling of the court in retaxing the said costs the plaintiff excepts.

And on the 11th day of our said circuit court aforesaid, the same being the 6th day of October, the following, among other, proceedings were had, to wit:

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't. } 8752.

Now again come the parties, by their attorneys, and defendant tenders to the court here her bill of exceptions, which are, by consent of plaintiff, filed, and are by the court allowed, signed, and made a part of the record herein; and which motion to retax costs is as follows:

34 In the Circuit Court of Jackson County, Missouri, at Independence. September Term, 1877.

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,
vs.
THE HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Def't.

The defendant moved the court to retax the costs in the above-entitled cause in the following particulars: John R. Gaunt was a witness for the plaintiff in the above-entitled cause at the March term, 1877, of this court, and his costs are improperly taxed as follows: 560 miles travel in going to and returning from the court, at eight cents per mile, amounting to $44.80, when they should have been taxed at eighty miles travel, amounting to $6.40; and Joseph C. Tebeau was a witness for the plaintiff in the above-entitled cause at the March term, 1877, of this court, and his costs are improperly taxed as follows: 520 miles travel in going to and returning from this court, at eight cents per mile, amounting to $41.60, when they should have been taxed at eighty miles travel, amounting to $6.40; and the costs of said witnesses, taxed as aforesaid, were adjudged by this court at said term to be paid by the defendant for the following reasons, to wit:

1st. Because the defendant is improperly taxed with all of said mileage over and above eighty miles in going to and returning from court.

35 2nd. Because the deposition of each one of said witnesses had been taken by the plaintiff in said cause and was on file at said term and could have been used on the trial of said cause.

3rd. Because it is illegal, unjust, and oppressive on the defendant to tax the costs of the plaintiff's witnesses for any mileage in excess of eighty miles.

JAMES CARR,
Att'y for Def't.

And which bill of exceptions is as follows, to wit:

In the Circuit Court, Jackson County, Missouri, at Independence. Sep. Term, 1877.

THE MISSOURI RIVER PACKET COMPANY, Pl'ff,

vs.

THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, Def't.

Be it remembered that on the trial of this cause the following proceedings were had:

The plaintiff, to sustain the issues on its part, offered evidence as follows:

The defendant, by its attorney, admitted that plaintiff is a corporation as alleged, and plaintiff admits that defendant is a corporation as alleged, and became the owner of the Kansas City &
36 Cameron railroad and the owner of the bridge in controversy, as alleged in its answer, and that the St. Louis, Kansas City and Northern railway extends from the city of St. Louis to said bridge on the north side of the Missouri river, and that the Kansas City, St. Joseph & Council Bluffs railway extends from Council Bluffs, in the State of Iowa, to the same place, and that both of the railroad companies owning and operating said railroads and also defendant run their trains over said bridge, carrying the United States mail, passengers, and property, and said bridge was also used for a wagon-way and footway for passengers.

The plaintiff read in evidence the act of Congress approved July 25, 1866, which is in words and figures as follows:

SEC. 2. And be it further enacted, That any bridge built under the provisions of this act may, at the option of the company building the same, be built as a drawbridge, with a pivot or other form of draw, or with unbroken or continuous spans: Provided, That if the said bridge shall be made with unbroken and continuous spans it shall not be of less elevation in any case than fifty feet above extreme high-water mark, as understood at the point of location, to the bottom chord of the bridge, nor shall the spans of said
37 bridge be less than two hundred and fifty feet in length, and the piers of said bridge shall be parallel with the current of the river, and the main span shall be over the main channel of the river and not less than three hundred feet in length: And provided also, That if any bridge built under this act shall be constructed as a drawbridge the same shall be constructed as a pivot drawbridge, with a draw over the main channel of the river at an accessible and navigable point, and with spans of not less than one hundred and sixty feet in length in the clear on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than two hundred and fifty feet; and said spans shall not be less than thirty above low-water mark and not less than ten above *above* extreme high-water mark, measur-

ing to the bottom chord of the bridge, and the piers of said bridge shall be parallel with the current of the river: And provided also, That said draw shall be opened promptly, upon reasonable signal, for the passage of boats whose construction shall not be such as to admit of their passage under the permanent spans of said bridge, except when trains are passing over the same, but in no case
38 shall unnecessary delay occur in opening the said draw during or after the passage of trains.

SEC. 3. And be it further enacted, That any bridge constructed under this act and according to its limitations shall be a lawful structure, and shall be recognized and known as a post route, upon which also no higher charge shall be made for the transmission over the same of the mails, the troops, and the munitions of war of the United States than the rate per mile paid for their transportation over the railroad or public highways leading to the said bridge.

SEC. 10. And be it further enacted, That any company authorized by the Legislature of Missouri may construct a bridge across the Missouri river at the city of Kansas, upon the same terms and conditions provided for in this act.

The plaintiff next read in evidence the deposition of SAMUEL RYDER, which is in words and figures as follows:

Ryder.

1st Int. State your name, age, residence, occupation.

Ans. My name is Samuel Ryder; age, 61; residence, Griggsville, Pike Co., Illinois; business, steamboat captain.

2nd Int. Where have you been running for the last several years that you have been — steamboat?
39 A. On the Missouri river, from St. Louis to Kansas City; also in other rivers at other times.

3rd Int. Where were you running in 1874, and in what boat—say March, 1874?

A. I was steamboating in the Missouri river one the steamboat Alice.

4th Int. Who did she belong to, if you know?

A. She belongs to the Missouri River Packet Company.

5th Int. What were you on the Alice?

A. I was master; I was in command of her.

6th Int. How long previous to March had the vessel been running up there?

A. That was her first trip that season.

7th Int. State if you know anything that happened to the vessel at that time; and, if so, state what it was and state how it happened, and all the particulars in regard to the accident.

A. I went up the river as far as Wyandotte and put out my freight. I left Wyandotte in the afternoon, I couldn't tell you the hour, and came on down to pass through the bridge at Kansas City. In coming through the bridge, running in our usual course, as I had been running four or five years, ever since the bridge has been built, the change in the current of the river—caused, I suppose, by the sink-

ing of the pontoons that they had placed inside the pier—threw the boat over to the left against the center of the pier of the
40 draw and tore away completely the larboard wheel, so that it dropped down into the water. The boat was then perfectly unmanageable and drifted around, but, as good luck would have it, we got a line out to the left-hand shore coming down and secured the boat at the bank, opposite Kansas City. We then laid there, I don't recollect the number of days exactly, but some 12 or 13 days, to repair. I had myself to go out through the country to get timber to do the repairs, and as I was away from any port I kept my crew, such as could work, to assist me in doing the repairs. One of the flanges was broken; that we had to send to St. Louis; sent and got timber up by rail, and the repairs were very nearly completed, except painting, where I lay, and the work was done—almost all of it—by the crew of the boat.

8th Int. What did you say you struck?

A. We struck the center pier or the draw-pier of the bridge; the pier that the draw swings on, or the abutment that is connected with it.

9th Int. What do you call that—the breakwater?

A. I call it all the pier. It is an extension of the pier up the river; the extension of the pier up the river is what we struck.

41 10th int. Now, will you please state, if you know, how much time, if any, the boat lost by reason of that accident?

A. We lost twelve (12) or thirteen (13) days by the accident.

11th int. Now, do you know what it actually cost to repair the vessel—to repair the damage that was done by that accident alone?

A. I know by the bills that were handed in and *and* the account kept by Mr. Gaunt, the clerk. Of course I didn't pay the bills, but I saw them when they were paid and saw what they were worth when they were paid. I could vouch for them that the bills were all correct.

12th int. About how much was it?

A. I have forgotten the amount now; I would have to have the figures to call my mind to the exact amount now.

13th Int. Will you please state, if you know, what were the actual expenses of the crew whilst the boat was compelled to lay up in that condition? State as near as you can come at it.

A. Well, you can get those items from the clerk; the clerk has those vouchers and can give you the items. I only know this—that I just kept the men that could work to do the repairs, and we boarded them ourselves on the boat because we could do it
42 cheaper than we could pay their board on shore.

14th Int. I will ask you what, if anything, could that boat have been chartered for, or what could vessels of that kind have been chartered for at that time per day—a vessel of her class?

Objected to as incompetent and irrelevant.

A. I should think to charter a boat of that class would be worth about a hundred a day.

15th Int. Is that without the crew?

A. Yes, sir; without the crew.

16th Int. Can you state what were the average net earnings of a vessel per day during that time? If so, please state.

Objected to as incompetent & irrelevant.

A. That would be a very difficult question to determine. Boats sometimes make a great deal of money on a trip, and sometimes they don't make so much. The chances for that trip were good.

17th Int. At that time what would have been the net earnings of that vessel during that time?

A. Taking the trip from there down the earnings would have been two hundred dollars a day, aside from the expenses—the net earnings. It was the first boat up the river, and there was a big show for the trip down.

43 18th Int. What was the condition of this vessel in regard to being seaworthy and so on, at the time the accident happened?

A. She was perfectly seaworthy, sir, in every respect.

19th Int. Do you — who was at the wheel at the time the accident happened? If so, state.

A. It was a pilot by the name of Ed. Tebeau.

20th Int. What time in the day was it that this accident —?

A. I think it was some time in the forenoon. It was in the daytime, at any rate, and, I think, in the forenoon; probably nine or ten o'clock.

21st Int. What kind of day was it, if you remember?

A. Well, it was a fair day; pleasant, ordinary comfortable day, but little wind blowing.

22d Int. Please state, if you know, what, if anything, contributed to this accident, other than this current caused by this breakwater there at the bridge.

A. I don't know of any other cause for it. I can assign no other, and think of no other cause. We had a pilot on watch that has been running there through the bridge, I guess, ever since the bridge was built—a good, skillful pilot—& we were running as we had always run.

23d Int. If you know anything else in regard to this matter
44 that I haven't asked you about please state it.

A. Well, I would state this: The company, after building the bridge, had built some four pontoons, I think, at the place above the inside pier of the bridge to enable the boats to go through with safety. Those pontoons during the winter had sunk, and they blocked the channel of the river. We usually run down inside of the pier, & the consequence was that it drew the current all over against this center pier that the draw of that bridge swung on; that was the sole cause of the accident—the changing of the current of the river by those pontoons.

Cross-examination by S. N. HOLLIDAY, Esq.:

1st Int. What direction were those pontoons from this draw that

the bridge rested upon when it was open—this pier that the bridge rested upon when the draw was open?

A. The inside pier that the bridge stands on is out from the shore, I should say, about forty (40) feet. By the inside pier I mean the one next to the shore. These pontoons extended from that pier up until they connected with the shore. When they sunk they really obstructed the passage of all water down inside of that pier, throwing the current off against the center pier that the draw swings on.

45 2nd Int. When these pontoons were all extended from that pier to the shore could the water get between that and the shore?

A. Only when the water had run over them; they were all sunk.

3rd Int. The- were sunk intentionally, were they not?

A. No. sir; the ice during the winter had sunk them.

4th Int. How were they built; didn't they rest on the bottom of the river?

A. No, sir; they were floating and made fast, to hold them in place.

5th Int. For what purpose?

A. The object was in coming down through the bridge, if the wind was blowing the boat could run againt these pontoons and get out a line and make fast to them and drop through. I came through there all last summer.

6th Int. Didn't you see that those pontoons were gone when you passed up through the bridge?

A. We passed up through the bridge in the night and had no chance to see.

7th Int. When you came down next morning couldn't you see that they were gone?

A. It was to- late then to see. It was a very rapid current and there was no chance to stop there.

8th Int. You went right through?

46 A. Yes, sir; under headway. If we had had a little more headway we would have missed it. That is the only way a boat could possibly get through—to put on all the steam we could, and then it was a very difficult matter to miss them.

9th Int. You didn't strike those pontoons at all?

A. O, no, sir; because they were into the shore.

10th Int. When did you first notice that the pontoons had sunk?

A. When we got close to them.

11th Int. Where were you at the time?

A. I was on deck, looking out forward.

12th —. When did you first notice that they were not there?

A. I think when I first noticed it we were, maybe, one hundred or one hundred and fifty feet above.

13th Int. Had you slackened up any at all?

A. O, no, sir; we can't slack up there. There is no safety in that at all. You have got to let the boat have full headway at any time—when the river is in the best condition.

14th Int. Is that the way you always go through that draw?

Q. Yes, sir; except when they had the pontoons in place; then I landed against them and got out a line and dropped through.

15th Int. Which way did you go first, head or stern for-most?

47 A. Stern for-most.

16th Int. Isn't that the proper way?

A. No, sir; there isn't one boat in ten (10) that does it when the pontoons were there; I did it because I knew I could do it in perfect safety.

17th Int. How did you know the pontoons were not there and that it was not necessary for you to land and dropp through in the usual way?

A. I don't know of any boat excepting mine that ever did land against the pontoons. When we got near enough to round to and come in against them I saw that they were gone.

18th Int. You did intend, if the pontoons were there, to land against them?

A. Yes, sir; I did, but I couldn't have landed after noticing that they were sunk out of they way.

19th Int. But you intended to if they had been there?

A. I intended to, but after seeing I couldn't I couldn't do it.

20th Int. You say if the pontoons had been there you could have dropped through in your usual way. I will ask you if you did not notice soon enough that the pontoons were gone for you to land and drop through stern for-most?

A. I don't know that I could have landed. I don't think

48 I would have had time to round to.

21st Int. How long had you been coming through the bridge before?

A. Ever since it was built.

22d Int. When was that?

A. I don't recollect the year.

23d Int. You intended, you say, to drop through stern foremost all the time?

A. Yes, sir.

24th Int. Until you got down there and discovered the pontoons were not there?

A. When the pontoons were not there I couldn't do it.

25th Int. And you couldn't land?

A. No, sir; after getting down near enough so I could see the pontoons were not there but was sunk, I had no chance to round to. The current runs at the rate of eight (8) to ten (10) miles an hour there, and a boat has got to round to away above there and come down and drop through.

26th Int. If you had been stern for-most you could have dropped her through at that time, couldn't you?

A. No, sir; couldn't have done it; the current would have taken me right over to the center pier.

27th Int. Couldn't you see the current and which way it was tending?

A. You can't tell until you get down close to the bridge.

49 28th Int. You knew the fact that the current was in that direction, didn't you?

A. O, no; if I had known the current was setting over there so strong I could have done more towards avoiding the accident.

29th Int. What was the condition as to ice at the time?

A. There was a little ice running. The ice didn't force her over at all. She wasn't forced over against the ice. The ice had nothing to do with carrying her over. We had been up through all the ice there was, and had come up through it all the way from Wyandotte, and the ice had nothing to do with it at all. The accident was caused entirely by the change of the current, which we were not posted about.

30th Int. How fast was the boat going at the time?

A. I don't know; twelve or fifteen miles an hour, I suppose; we had a very strong current there.

31st Int. How wide is the boat; what is — beam?

A. Between sixty (60) & sixty-five (65) feet.

32d Int. How wide is the draw there?

A. Well, I don't know — certain what the width of it is.

33d Int. Can you state from the appearance of it how wide it is?

A. That would be very hard to tell; it would be mere guess-
50 work with me, because I had no chance of measuring it; if I had been through with barges I could tell pretty near, but never having gone through with anything but a steamboat, I don't know.

34th Int. Can you tell when you started through the draw how far you were from this pier that the bridge rested upon—the pier that the draw rested upon? How far were you south of that when you started down through the larboard side of the boat?

A. I couldn't tell you. I could simply say in regard to that that we were running it just as we always did, keeping off from the shore just far enough to miss the shore and to miss that inside pier.

35th Int. Then you don't think it was in consequence of the bridge at all or the manner of its construction or the pier that the bridge rested upon; it wasn't anything of that kind, but it was these pontoons that caused the accident?

A. If the draw had been wider, there would have been that much more chance to get through.

36 X Int. The sole cause of the accident, you think, was these pontoons being sunk?

A. I think that was the cause of the accident.

37 X Int. You say the sole cause; do you mean that?

A. Well, I mean, you might say, the sole cause, but there is
51 always danger in getting through those bridges.

38 X Int. Do you know from the stake of water at that time what depth would be between the southern pier & the south bank of the river before the pontoons were sunk there?

A. I couldn't tell you. I know there was a pretty good stage of water there, & the current always run through there rapidly & kept a good landing down at Kansas City; the landing filled up in

Kansas City partly in consequence of these pontoons sinking, I am told.

39 X Int. Do you know how far it was from the southern edge of that south pier to the shore?

A. That would be my judgment entirely. I should say forty feet.

40 X Int. Was that closed by these pontoons sinking?

A. I think it was pretty much entirely; at least enough of it to change the current of the river entirely.

41 X Int. How long was it before this that you passed up through that draw?

A. We went up the night before, after night.

42 X Int. You didn't discover anything about the current then?

A. No, sir; it was dark then.

43 X Int. There didn't appear to be any change of the bre-dth or depth of the water in the channel?

A. O, no, sir; not in the short time we were above.

44 X Int. With this current going from the shore across to
52 this pier with such velocity as you seem to think, why couldn't you discover it in going up that night?

A. In going up stream with a boat you can't tell any such thing as that. We run from the inside of the pier & kept her head over & against the pier, as we always do, hugging that inside pier; it was in the night & we had no chance to see the current.

45 X Int. Don't you think if you had gone to the shore & dropped her through stern foremost you could have gotten through there safely?

A. Well, that is possible. I don't know but it is possible, but it is not always expected of a boat to do that.

46 X Int. This was the first boat down that season, was it?

A. Yes, sir; I think so.

47 X Int. And you can't tell the direction of the current or change of the current in going up the river, but it is only in coming down that you can find these places?

A. Yes, sir.

48 X Int. You don't know that that boat could have been chartered at a hundred dollars a day, do you?

A. No, sir, I know this, though, that we wouldn't have chartered her for less than a hundred—our company would not.

49 X Int. You don't know that she could have been chartered for that, do you?

A. No, I don't know as she could.

53 50 X Int. How has the business been for the last year, as to making money chartering and selling boats?

A. Well, it has been tolerably good; our boats have made from eight hundred to a thousand dollars a week.

51 X Int. During last season?

A. Yes, sir.

52 X Int. The whole season?

A. Well, I don't know; I know that some of them have, but I don't know that they all have.

53 X Int. Don't you know that steamboats were cheaper last year than they have ever been since the beginning of the war?

A. I don't know that good boats were any cheaper last year than they have been at any time during the war. Mr. Gaunt, the clerk, went onto a boat after he left the Alice that, I guess, averaged a thousand dollars a week right straight along; that was the Lewis.

54 X Int. The Alice didn't make that through the season, did she?

A. The Alice didn't run very regular during the season, but she would have made that on that trip.

55 X Int. If she had made two hundred, or a hundred dollars a day, you would have run, wouldn't you?

A. Well, that is just as I tell you; sometimes boats will make a good deal of money and sometimes they will not, but if a
54 man was going to charter a boat he would charter her taking the view that the boat was worth so much money & would make so much money.

56 X Int. Why didn't she run during that whole season?

A. I don't know; but she was run during most of the season. I was not in the company; I left the company in the spring & went on the Illinois river; I don't know that she run all the time regularly.

57 X Int. How much was the Alice worth?

A. Well, somewhere in the neighborhood of thirty thousand dollars at that time; at the close of winter she was repaired & all in good order.

Re-exam.:

Int. Would there have been any trouble at all in chartering the Alice at that time at the rate you have specified, during March & April, 1874?

A. I don't think there would; I don't know; a man can't tell about such a thing; I know if she hadn't met with that accident she would have made a good deal more than what we claim for damages.

Int. That was one of the best parts of the season, was it not?

A. Yes, sir; the best parts of the season, & she was in the best place for it, too.

Signature waived.

55 The plaintiff next read in evidence the deposition of ROBERT WRIGHT, which is in words and figures as follows:

Robert Wright.

1st Int. What is your age?

A. I am sixty-four to-day.

2d Int. What is your business?

A. I have been piloting on the river; in fact, I have been a little of everything on the river; I have been pilot & captain together for the last thirty (30) or forty (40) years.

3d Int. Where have you been running mainly?

A. On the Missouri river; from here to the head of it.

4th Int. In 1874, about March, what, if anything, were you doing, & on what & where?

A. I was on the Alice at that time.

5th Int. Do you know of anything happening to her about that time.? & if so, where, and give the circumstances & all that you know about it.

A. I know where she struck the bridge. I wasn't on watch while going up; I was asleep. It was after night; we went up above and put off our freight & came down the next morning. I don't recollect exactly what time it was; it was somewhere between 9 & 12 o'clock, as near as I can recollect. We came down to the bridge & appeared to come along very well, rounded in the way we generally round boats to come through the bridge, but just as we struck this
56 current that just set her right over to the larboard side & she struck this breakwater as they call it, which let her wheel down; then I went below a little ways & the wheel caught in the bottom of the river & turned her right around, & we worked her into the other side of the river this side of Kansas City, & the captain put a line out & made her fast.

6th Int. What was her condition previous to striking that breakwater?

A. She was in very good order, for all I know.

7th Int. What was her condition after she had struck?

A. Well, it let the wheels and the gallows frame all down into the river.

8th Int. Was she seaworthy after that?

A. O, no.

9th Int. Do you know how long she was delayed by reason of that?

A. I do not; I came down home & then went back after her.

10th Int. Will you please state, if you know, what was the cause of that current—what caused that current?

A. Well, I don't know of anything else but those pontoons. It never was that way before. I came through there often; I have come through there both head foremost & stern foremost.

11th Int. Who was at the wheel, if you know, when the accident happened?

57 A. Mr. Tebeau. I was in the pilot-house coming down.

12th Int. Please state how long he has been a pilot & what kind of a pilot he is.

A. I can't say that; he has been a pilot for a number of years. He was always considered a very good pilot—good as anybody. He was pilot for me when I had charge of the St. Luke.

13th Int. You were in the pilot-house, you say, at the time the accident happened?

A. Yes, sir.

14th Int. State if you know of any other way that would have been better for the boat to go in going through this bridge in the manner she did.

A. I don't know of any other way, sir. To drop a boat down stern foremost without any pontoons is rather a dangerous operation. It would be very likely to swing across to the inside pier. I think I did drop through there once before there was any pontoons, but we had a great deal of trouble; that was on the Cornelia. We were there several hours dropping through—two or three hours; maybe longer.

Cross-examination by Mr. HOLLIDAY:

15th Int. Did you run up the river the remainder of the season?

A. Well, no, I did not. I run above there from St. Joseph up. I don't think I made a trip up there after I came down on
58 the Alice.

16th Int. This was the first trip that was made up the river on a boat that season, was it?

A. Yes, sir.

17th Int. How was the river as to ice at that time?

A. There was some ice—very little; none to do any harm.

18th Int. Was Tebeau at the wheel going up?

A. Yes, sir; I was asleep.

19th Int. In coming back down through there, by taking time, you could have dropped through stern foremost, couldn't you?

A. Well, just as I tell you, we might have done it and we might not; we might have swung across that pier.

20th Int. Wouldn't you consider, with the pontoons not being there and that current, and not knowing how the current was at all, would you think it would be the most prudent thing in coming through on the first trip of the season without knowing how the current was at all?

A. Indeed, I do not. I should have come through head foremost always.

21st Int. Without making an examination?

59 A. Well, I didn't know anything about these pontoons. I saw they were not there after we got down a piece. I didn't notice that at all until just before the accident.

22d Int. Were they visible above the water at all?

A. The pontoons? Yes, sir; they were lay- straight up and down the river, though, and before that they lay down into the shore and out to the pier.

23d Int. The western pontoon was swung around and run up and down with the channel, did it not?

A. Yes, sir. I supposed, from the looks of them, that they had been jammed in with ice, and it sunk them, and they hadn't got them out and put them into the proper places.

24th Int. Do you know how long the ice had been open there?

A. No, I do not. I don't recollect; if I wasn't there I couldn't know anyhow.

25th Int. How far did the pontoons reach above the water at that time?

A. A short distance. I don't think they were over a foot; maybe some of them were under water.

26th Int. Do you know what kind of night it was the night before?

A. No; I was asleep.

60 27 Int. You know whether it was a cloudy night or not, didn't you?

A. I don't think it was. I don't recollect about that. I can't say, for I wasn't on watch.

28th Int. In going up the Missouri river the first trip, especially in the spring, can you tell any change in the current? I will ask first, did you land in coming up or going down?

A. We land both ways.

29th Int. If you had been at the wheel in going through that draw that night, couldn't you have told from the bearing of the boat in going through that draw that there was a strong current?

A. I don't know as I could, sir.

30th Int. It was not strong enough for that?

A. I don't know how strong it was going up.

31st Int. If it was as strong going up as coming down, and you being at the wheel, could you have told whether the current was stronger and tending more to the northward than usually?

A. Not unless it had knocked the boat over to the pier. If it had I could have told pretty quick.

32d Int. You could'nt tell from the inclination to go over there and your having to turn the rudder?

A. I could tell what it was.

33d Int. You wouldn't know what it was?

61 A. No; I might suppose it was the wind or something else; very often a boat will run off and a person can't give any cause for it at all.

34th Int. If you had been there and saw it tending that way that night, in going down the next day you wouldn't have examined to see whether it was a change of the current?

A. I don't know what I should have done; it would depend upon how I felt about it.

35th Int. Can you as easily detect a change of the current in going up as in coming down?

A. Yes, sir; more easily, except on a sand bar.

36th Int. I am talking about supposing the current was changed towards that pier?

A. Very often a boat won't run off with a change of the current where it ain't shallow water; where it is shallow water it is bound to run off.

37th Int. Did you find a very strong current going over towards the pier the next day, when you came down, where the accident occurred?

A. Yes, sir; I saw it.

38th Int. Was it very strong?

A. Yes, sir; I think it was very strong.

39th Int. A current of that kind, could you detect it as easily going up as coming down?

62 A. No, sir; a boat generally goes up slow and comes down fast.

40th Int. When you are coming down fast, couldn't you detect it quicker than going slow?

A. Yes, sir.

41st Int. You can detect it quicker then in coming down through it fast?

A. Yes, sir.

42d Int. Wouldn't the current have more effect on a boat when it is coming up very slowly than when coming fast?

A. No, sir; when you go through slow if she runs off you can stop the engine and straighten her up.

43d Int. I am talking about how you can detect a change in the current, or a very strong current, more easily going up or coming down stream?

A. Well, I suppose about the same.

44th Int. What is the care you have to use in piloting on the first trip going up and down the river in the spring after the ice is broken —whether more on the first than the second or third trip?

A. Yes; there is more; you have to run slow and use the lead a good deal, and different things—stop the engine, &c.

Signature waived.

The plaintiff next read in evidence the deposition of JOHN F. MASSIE, which is in words and figures as follows:

John F. Massie.

63 Q. What is your business?

A. Steamboat man—pilot.

Q. On what river?

A. I have been on the Missouri river mostly.

Q. How long have you been pilot on that river?

A. Twenty years.

Q. Are you well acquainted with the river in the neighborhood of Kansas City and the bridge located there?

A. Yes, sir.

Q. If you know will you please state what is the best and proper way for a boat to come through the bridge at that place?

A. I always found it the best way to go head foremost—bow foremost.

Q. Is there any difference in regard to that as to whether going up or coming down?

A. Not a great deal. I would not think so. I would consider it the best way to go through either way.

Q. Have you come through there frequently?

A. I used to come through there a good many times; ever since the bridge was built up to a year or two back.

Q. Are you in any manner in the employ or interested in the plaintiff in this case?

A. No; I am not employed or interested.

Q. Do you know Robert Dailey, a Missouri river pilot?
A. Yes, sir.
Q. For how long?
A. 18 or 20 years; probably longer.
Q. Do you know what kind of a pilot he is from personal experience?
64 —. He has always been considered very good.

Cross-examination by Mr. HOLLIDAY:

Q. How many times do you suppose you ever piloted a boat through there?
A. I could not give an idea, hardly.
Q. How many years?
A. Ever since the bridge has been built to the last year or so.
Q. When was the bridge built?
A. I don't recollect the year. It has been 10 or 12 years. I don't recollect the year it was finished.
Q. From the time the bridge was built every year up to a year ago?
A. A year or so ago. It has been between one & two years.
Q. Did you pilot any there during 1873?
A. Yes, sir.
Q. Do you recollect up to what time?
A. It was along in August—July or August.
Q. How often did you go through there a month in the boating season?
A. In the last two or three years of my steamboating I did not have to pass through very often; before that time very often.
Q. How often?
A. Probably twice in two weeks' time the run of the boating season.
Q. That would average once a week?
A. Yes; I suppose it would.
Q. Up to two or three years ago you passed through once a week in the boating season since the bridge was finished?
65 A. Yes, sir.
Q. What is the boating season in the Missouri river?
A. Generally from the first of March till the last of September—middle of October—sometimes later.
Q. How many accidents did you have at the bridge?
A. Never had any.
Q. How many different methods did you ever adopt in coming through the bridge?
A. I don't think I ever adopted but one.
Q. And that one to come through head foremost?
A. Yes, sir; to come through bow foremost.
Q. How many different methods did you adopt as to speed?
A. Sometimes go slow—what we would call a slow head of steam—and at other times go with a full head.
Q. What would govern you so to the different rates of speed?
A. Sometimes I would feel as though I wanted my boat in proper

condition to make my way through the piers of the bridge. I would work her slow, to keep her in the position I would wish and give her no chance to get a start on me.

Q. Is the bridge at Kansas City a drawbridge?

A. Yes, sir.

Q. Near which shore is the draw?

66 A. I would call it on the south side of the river.

Q. Which side of the draw is usually passed?

A. The south side—the one next to the Kansas City side.

Q. Do they ever pass through the other?

A. I never have.

Q. Did you ever see any one do it?

A. I never have.

Q. How did the face of the piers run with the current when you passed through?

Q. Nearly straight with the current—right at the bridge; just above the shore kind of throws the current off from the shore a little, causing it to strike the piers of the bridge rather in a quartering way.

Q. How is the channel of the Missouri river during the different seasons and same season, as to whether it changes much?

A. It is very changeable.

Q. Do you know what effect the piers of a bridge have upon the currents in changing currents and forming cross-currents?

A. I don't know what effect they would have. They don't appear to have much effect when I see them.

Q. Do you know what effect piers in bridges have in creating cross-currents? Did you ever see anything of that kind result?

67 Q. Generally under those piers it makes an eddy; slack-water divides the current so as to pass the piers.

Q. I am talking about other bridges across the Missouri and Mississippi.

A. That is generally the effect; under the piers is formed a sort of an eddy.

Q. Between the piers?

A. It creates a current.

Q. Does it have any effect in creating a cross-current?

A. No; then when it gets under the pier it forms an eddy under the pier.

Q. Beneath the pier?

A. Below the pier, on the lower side of *of* the pier, where it strikes the pier sort of angling, it makes an eddy on the under side of the pier.

Q. How wide is the draw?

A. I don't know the width of it.

Signature waived.

The plaintiff next read in evidence the deposition of WILLIAM W. ATEO, which is in words and figures as follows:

William W. Ateo.

Q. State your business.
A. I am secretary of the Missouri River Packet Co.
Q. How long have you been such?
A. Since 1867.
Q. Do you know the steamer St. Luke?
A. Yes, sir.
Q. Do you know anything about this accident that has been spoken of by Captain Keith?
68 A. Nothing of the accident, except the repair bills that were consequent on the accident—some of them.
Q. Will you please state what bills you know of having been paid and the articles obtained for the boat?
A. Here is one bill, Collins & Holliday, $347.00 (bill hereto attached, marked Exhibit 10). Collins & Holliday, $149.28 (bill hereto attached, marked Exhibit 11). Daniel Kerwin, $83.37 (bill hereto attached, marked Exhibit 12). Hunt Owen, $15.61 (bill hereto attached, marked Exhibit 13). Daniel Toombs, $9.00 (bill hereto attached, marked Exhibit 14). T. C. Bonsack, $135.20 (bill hereto tached, marked Exhibit 15). Carpenter work paid to Anderson, $68.00 (bill hereto attached, marked Exhibit 16). Carpenter work, $38.00 (bill hereto attached, marked Exhibit 17).
Q. When was that work done and put on the boat, if you know?
A. The foundry bill was shipped from here to Kansas City.
Q. Do you mean the bill of Collins & Holliday?
A. Yes, sir.
Q. The balance of it was done here?
A. Yes, sir.
Q. Do you know anything personally in regard to doing the work?
A. I was there most every day during the time the work was being done and saw it done and paid the bills spoken of.
69 Q. What condition was the boat in previous to the accident on leaving here on the trip up?
A. She was in good condition, having been thoroughly repaired that winter at an expense of $15,000.
Q. What, if any, portion of this work or these materials would have been necessary if the accident had not happened to the vessel?
A. None at all; the boat was in perfect condition.
Q. What, if anything, do you know in regard to the charter value of a vessel of her class at the time this accident occurred? And, if you know, state what it would be.
A. At the time of that accident our river was low, and the St. Luke, being a low-water boat, was very valuable to us just at that time, and had she lived nor *meeting* with the accident I am satisfied our earning would have been considerable over $100.00, probably $140.00, a day from her.
Q. What would such a vessel charter for?
A. She would charter readily for $100.00 a day.

Q. Do you know anything about the wages of the crew of the vessel?

A. There is a wages bill paid here by myself amounting to $82.00. (Bill hereto attached, marked Exhibit 18.)

Q. That was for wages of the crew while she was laid up?

70 A. Yes, sir; while she was being repaired here at St. Louis.

Q. You say you have personal knowledge of the furnishing of the items and the payment of the bills?

A. Yes, sir.

Q. You know nothing of the accident personally?

A. No, sir.

Q. How long had you been steamboating, if at all, on the Missouri river previous to being secretary of the company?

A. About eleven years.

Q. What, if anything, do you know in regard to Mr. Bailey's capacity as a pilot during that time or during the time you have been secretary?

A. He has always stood as a first-class pilot.

Q. How has Captain Keith stood?

A. As a first-class pilot.

Cross-examination by Mr. HOLLIDAY:

Q. Your business as secretary is to just keep accounts of the company?

A. Well, not that especially. I have had a good deal of the supervision of affairs outside of that.

Q. What was your business on the river for ten or eleven years?

A. Clerk most of the time.

Q. You are not a carpenter or engineer and know nothing about these things?

71 A. No; only what I know from general observation.

Q. Could you tell what was necessary to be done—could you tell what *what* is necessary to be done in iron work or carpenter work?

A. I think I could.

Q. Do you know enough about it to make out an estimate of the cost?

A. Yes; I have made out several.

Q. Did you examine this bill enough to know that the necessity for them was created by the accident?

A. I know from the boat's condition prior to it that it was not necessary to have anything for repairs, and I know that the repairs were necessary to put her in running order.

Signature waived.

The plaintiff next read in evidence the deposition of LOUIS ROSCHE, which is in words and figures as follows:

Louis Rosche.

Q. What is your name, age, & residence?

A. Louis Rosche. I am twenty-six. I reside in the city of St. Louis, Mo.

Q. What were you doing in September, 1874?

A. I was mate on the str. St. Luke.

Q. Do you know anything of a collision of that boat with the bridge at Kansas City, Mo., in the month of September, 1874?

A. Yes.

Q. State the date when it occurred and the circumstances you witnessed.

72 A. It was the 13th day of September, 1874. I was standing on the stages in the forward part of the boat. The boat was coming down the river. We were coming down the main channel, the same as we run all the time. When we got about half way through the bridge the cross-current caught our stern and drove it against the breakwater.

Ques. What caused the cross-current you speak of?

Ans. In my opinion, the pontoons that were sunk in above the shore pier or south pier of the bridge.

Q. How long have you been on that river?

Ans. Well, I have been on the river fifteen years—since I was a boy.

Ques. Are you familiar with the channel and the navigation of the Missouri river?

Ans. Yes; I know something about it.

Ques. When that boat entered the draw, please state its position.

Ans. We were coming down in the channel pretty near the shore and aiming straight through between the two piers, a little nearer the south pier than we were to the breakwater.

Ques. How did the boat stand as to the draw rest?

Ans. She was as straight as could be when the current caught her.

Ques. Which pier did she strike & what part of her struck?

73 Ans. She struck the upper breakwater at her forward water-wheel beams on the larboard side.

Ques. From what you saw there and your experience in steamboat navigation of the river, how do you account for the accident?

Objected to by Mr. Holliday, for defendant, because the witness is not shown to possess the proper knowledge as an expert, and because the opinions of the witness are incompetent and irrelevant.

Ans. Those pontoons that were sunk in above the south or shore pier makes a cross-current there and throws the water right over against the head of the breakwater; that's all I know about it.

Ques. Had the bow of the boat passed the head of the draw rest, or not, when this current you speak of threw the boat?

A. Yes, sir.

Ques. When the bow of the boat passed the draw rest what was the position of the boat as to the draw?

Ans. Straight.

Ques. Do you mean by straight that the boat & its courses were parallel to the draw rest?

Ans. I mean parallel; the boat came straight through till the cross-current struck her.

Ques. Was that current visable on the surface of the water or not?

Ans. No, sir.

74 Ques. How long did you continue a mate of that boat after the accident?

Ans. To the best of my knowledge, I was there eight or nine days after the accident.

Ques. What are you doing now?

Ans. Contracting.

Ques. Are you in the employment of this plaintiff in any capacity?

Ans. No, sir.

Ques. Have you any interest in the result of this action?

Ans. No, sir.

Cross-examination by S. N. HOLLIDAY, for def't:

Ques. Explain what your present business is.

Ans. Loading and unloading steamboats at St. Louis. I have been in that business since last spring.

Ques. Do you load & unload the boats of the plaintiff?

Ans. I should explain: I am not a head contractor and I work on such boats as the head contractor takes.

Ques. Give us all the positions you have filled on the river & the dates, as near as you can.

A. I was deck sweeper from about 1860 for five years; then I was watchman for about two years; then I was deckhand for about two years; then second mate about a year, and then first mate

75 about five years. I was on the Red river, the Arkansas, the Mississippi, and the Missouri.

Ques. How many trips had you made up the Missouri river thro' this draw before this accident, during the year 1874? How many round trips?

Ans. I couldn't exactly say. I don't know that I had made any trip. I wasn't on the boat long before the accident.

Ques. Was that the first trip you had made on the St. Luke?

Ans. No. I had made several, but not through the draw. All the other trips the boat came back without going thro' the draw.

Ques. Did you see the pontoons yourself?

Ans. I have seen them.

Ques. Did you see them before the accident? If so, when was it, & what was their condition?

A. I have seen them long before the accident; don't know exactly how long. I saw them at a distance. Wouldn't say what condition they were in. I was say thirty feet from them. I was on

the steamboat when I saw them. I didn't see them when I was on the St. Luke. I only made one trip through the bridge (on the steamer Wm. J. Lewis) while the pontoons were there; that was when I was a deck sweeper. It was several years before this accident.

Ques When did you last see the pontoons?

76 Ans. I couldn't say how long; it has been so long I couldn't say when I saw them. It was several years before the accident—a good many years.

Ques. You could not see the cross-current that you say caught the boat?

Ans. No, sir.

Ques. What was the condition of the river as to water at the time of the accident at the bridge?

Ans. It was very low. It was what we called a four-foot stage. I didn't know how deep it was there at the bridge.

Ques. How wide was it between the breakwater and the south pier.

Ans. I can't tell how wide it was; I don't know.

Ques. How much did the boat draw?

Ans. 30 inches.

Ques. Did she have any barges?

Ans. No, sir.

Ques. How wide was she?

Ans. I believe she was forty or forty-two feet wide.

Ques. How long was the boat?

Ans. One hundred & seventy-five feet long.

Ques. What time of day was the accident?

Ans. At dusk.

Ques. How long was the draw?

Ans. I don't know how long the draw was.

Ques. What was the distance from the upper part or beginning of the space between the south pier and the breakwater and the lower part or the bottom when you left it?

77 Ans. The breakwater stands way above the south pier; that is further up the river. I couldn't judge how far; and then it extended about as far below the pier.

Ques. How far does the south pier extend up & down the river?

Ans. I couldn't say.

Ques. What was the position of the boat, as to the upper part of the south pier, when you first noticed a change in your course?

Ans. The bow of the boat was about opposite the middle of the south pier.

Ques. How was the light at that time?

Ans. It was twilight.

Ques. What was the speed of the boat?

Ans. I couldn't say. Sometimes they go through fast and sometimes slow.

Redirect examination:

Ques. Was there anything out of the usual way as to the speed at which the boat was going at the time of the accident?

Objected to Mr. Holliday as leading.

Ans. No, sir.

LOUIS ROSCHE.

The plaintiff next read in evidence the deposition of Octave Chaunte, which is in words & figures as follows:

O. Chanute.

OCTAVE CHANUTE, being produced and sworn and examined on the part of the defendant, deposeth and saith:

My name is Octave Chaunte; age, 44 years; reside in New York city; occupation, civil engineer. I have been engaged in
78 civil engineering about 28 years. I am now chief engineer of the Erie railway. I was the chief engineer in charge, and built the Kansas City bridge across the Missouri river at Kansas City, Missouri. I commenced work upon the bridge in February, 1867, and opened the bridge for traffic July 4th, 1869. The bridge was built under my direction, from plans made by myself or my assistants. The bridge was built under a law of the State of Missouri and an extension of the law of Congress, as I now remember, relating to bridges over the Missouri river. The bridge was built under an act of the State of Missouri entitled "An act to amend an act entitled 'An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company,'" approved February 9, 1857, the said amendment having been approved March 11, 1867, and an act of Congress approved July 25, 1866.

The spans of the bridge, beginning on the Kansas City side, were, first, a span of 54 feet across the Missouri Pacific road; next, a span of 130 feet, which extended to one of the draw openings to pier No. 1; next, a pivot span 360 feet long, which gave two draw openings of 160 feet 5 inches at dead low water in the clear of the masonry; next, a span of 200 feet; next, a span of 250 feet; next, a span of 200 feet; next, a span of 177 feet to the abutments on the north bank of the river. The bridge was placed 11 feet above the high-water mark of 1844, and 48 feet 3½ inches above low water; I mean the bottom chord was this distance above low water. Across the channel this is a drawbridge. The pier for the pivot span was made round and 29 feet in diameter. The other piers were made 7 feet thick on top, except those on the end of the drawbridge, which are 8 feet thick. The drawbridge, when swung open to permit the passage of boats, rests upon two timber structures called the upper and lower draw rests, and which have for their foundation cribs sunk in the river. The lower draw rest was seventy feet long and eighteen feet wide on the base. The upper was 64 feet long and 25 feet wide on the base. Upon refreshing my memory I find that the span across the Missouri Pacific is 66 feet instead of 54, as I have above stated. There

is an ice-breaker in front of the upper draw rest and forming part of it. Its upper surface and sides were planked in order to give a smooth surface upon which the ice might slide up and pass off. This upper draw rest was intended to protect the bridge against fields of ice, as well as the shock of passing steamboats in case they struck it in passing through the draw. The ice-breaker is the nose to the upper part of the upper draw rest. The planking only extended along the upper draw rest. In addition to the upper and lower draw rest there were four cribs, two above and two below the pivot pier and between it and the draw rests, which were used, first, to sustain the false works for the erection of the drawbridge up and down the stream; and second, as protection to prevent passing steamboats from running into the pivot pier. The upper and lower draw rests I consider necessary parts of the structure, but the cribs were not absolutely necessary, but were useful, and, I believe, have not since been maintained.

79 The draw was located after careful survey in order to cover as accurately as possible the navigable channel of the river. It could not have occupied a materially different position and been over the main channel of the river. It was located with special reference to the channel. The shore on the south or Kansas City side is rocky where the bridge is located, and the channel runs close up to the shore; at dead low water a sand bar extends about one-third way across the river from the north shore and raises with each flood; in ordinary low water the only portion of the river which is navigable is let through the two spans of the first drawbridge. On the south side the rocky shore extends to within a 100 feet of the draw opening or to the first pier. On the north side the edge of the sand bar is generally from 175 to 250 feet north of pier No. 3, or the north end of the draw; this sand bar, however, changes with every flood; it advances or recedes, is cut away or deposited, several times in each season.

On the south side of the south draw opening a row of pontoons were placed, extending from pier No. 1 up the river about 340 feet to the shore; the pontoons were pretty nearly parallel with the drawbridge when open, but gave somewhat width at the upper end than at their lower end at pier No. 1. These pontoons were constructed of flat boats 18 or twenty feet wide, and decked or floored over at a height of about four feet above the water and drew about 18 inches of water; they were provided with upright beams of timber to which ropes could be fastened, and were made use of by steamboats in descending through the draw at the time of high floods, great winds, or during the night. The boats generally rounded to, carried a line to the pontoons, made it fast to the vertical timbers, and dropped down alongside of the pontoons, paying out the line as they went down stern foremost. In case of a very rapid current, the pontoons would have been of further use to enable the boats to warp up the stream. At low water the depth of water in the south span is nowhere less than 20 feet. Under the pontoons the water shelved from nothing at the outer end to twenty feet deep at pier No. 1; their position was changed from time to time as the water rose and

fell, in order to place them in the most favorable place for steamboats. The pontoons varied from 53 to 65 feet in length.

OCTAVE CHANUTE, in continuation of his deposition commenced yesterday, on his oath further says:

These pontoons were constructed from the boats which had been used in boating stone during the construction of the bridge; when converted into pontoons they were about five and one-half feet in extreme depth; they were chained together about a foot apart, so that their outer edge presented a straight line next to the channel, and they thus formed a timber shore or floating dock for the use above described. So long as the pontoons remained in the proper line and position it was not possible that they should disappear and sink entirely out of sight, the west or upper pontoon being always so near the shore as to place it in shallow water; all but the upper one might sink entirely out of sight. The outer edge of the eastern pontoon was about 75 feet from the rocky shore at dead low water into the river; it would be more as the water rose; at high water it would be 110 feet distant. The current of the river runs at an angle of 72 degrees with the line of the bridge, which latter bears a little west of north; the piers are placed parallel with the current and form, therefore, an angle of 18 degrees, with a line perpendicular to the axis of the bridge. Great care was taken by me to ascertain the exact direction of the current through the bridge and locating
80 the bridge with reference to it. The direction of the current varies somewhat with the stage of the water and the position which the sand bars above the bridge assume from time to time, but upon the whole it has not been found to show any material divergence from the line given to the piers; and from the time that work was begun in the river, in 1867, until I left the West, in 1873, not the slightest accident happened to any of the steamboats in passing or repassing through the drawbridge.]

The part of the last sentence inclosed in brackets is objected to by plaintiff's counsel as immaterial and irrelevant.

The current has the same direction for a length ranging from 600 to 1,000 feet above the bridge. The direction of the current is prevented from materially changing by the rocky shore at the bridge site and by a riprap or stone revetment which is carried up round the bend of the river above the bridge site as far as the mouth of the Kansas river, a distance of nearly two miles. Since this has been completed the direction of the current has not materially changed through the drawbridge. It would depend altogether upon where the pontoons sunk if their sinking would make a cross-current. If they sunk upon the line in which they were originally placed between the shore and pier No. 1 they would not cause a cross-current; if they sank, however, transversely to the channel they might cause a cross-current.

The bridge begins on the Kansas City side, a short distance from the foot of Broadway, in the city of Kansas, being about 300 feet east of the foot of Broadway. As the bridge was originally designed

it was not intended to have a line of pontoons next to the Kansas City shore, but as the bridge approached completion, at the suggestion of some of the parties connected with the steamboat interest, most prominent among whom was president of the Missouri River Packet Company, Captain E. W. Gould, it was determined to provide this timber shore above the bridge as an additional safeguard.

I made frequent soundings during the building of the bridge to ascertain the exact channel. The diagram hereto attached, marked Exhibit A, has been drawn by me and is made part of this deposition; it shows the plan of the drawbridge and original location of the pontoons and the distance, as stated in this deposition.

Cross-examination by Mr. J. W. HOWE, of counsel for plaintiff:

The memorandum to which I have referred to refresh my memory was printed in 1870 to furnish an account of the building of the bridge, which, having some novelty, had attracted attention. I have been chief engineer of the Erie railway since February, 1873. I was employed to build the Kansas City bridge by the trustees of the Kansas City & Cameron Railroad Company, now consolidated with the Hannibal & St. Joseph Railroad Company. I drew the plan for the location of the piers; I located the piers; there was a foundation for a pier started which was not built upon; this was pier No. 4, north of the draw; except pier No. 4 the present piers are the original ones. No accident happened to any of the piers while building; it was never necessary to rebuild a pier.

Pier No. 1 is 65 feet from the Kansas City shore at low water, 110 feet at high water; there is no navigable channel between pier No. 1 and the shore, the water being about twenty feet deep at pier No. 1 and runs out to nothing by a somewhat irregular rock slope. There are two channels through the draw, but the south may be said to be the main one, being most used by steamboats; that is the channel between pier 1 and the pivot pier; the distance between the first pier and the pivot pier is 160 feet 3 inches in the clear between their copings, meaning by copings the top course of masonry;
81 it is 162 feet and 10 inches in the clear between those piers at a point ten feet below the top course, and it is 160 feet and 5 inches in the clear between them at low-water mark. These distances are measured by the bridge. The distances between the third pier and pivot pier are the same, respectively, as between the first and pivot, measuring by the bridge.

The shape of the first pier is a parallelogram, with the upper and lower ends pointed so as to present an angle of 90 degrees to the current, the sides being parallel with the current. The pivot pier is round. The centre of the draw is over the centre of the pivot pier, so that the distance between the centre of the draw and the end which rests on the pivot pier is the same as between the centre of the draw and the end which rests on the third pier, and these distances are each 180 feet. The end of the draw laps on the first pier about two and a half feet, the radius of the first pier being fourteen and a half feet; this is from its centre to the outside. The nearest distance between pier one and the pivot pier at low-

water mark is 160 feet and three inches. The pivot pier is further down the river than pier No. 1, and the bridge crosses at an angle of 18 degrees. The pivot pier is parallel with the current of the river and the third pier also, the draw being oblique to the current to the extent of 18 degrees. The centre of the pivot pier is 40 feet, about, below the centre of the first pier (No. 1) down the river. I placed the pontoons, I think, in September, 1869, for the trustees of the Kansas City and Cameron Railroad Company, for whom I built the bridge, and at the expense of the trustees. The line of pontoons consisted of single boats, one behind the other. Before the pontoons were placed J. F. Joy and I went to St. Louis together and had a meeting of the chamber of commerce called, and conferred with various gentlemen. The meeting was called to discuss the best steps to take to prevent interference with navigation in the building of the bridge at Kansas City. We met some gentlemen, whom I understood to be a committee of the chamber of commerce, and consulted with them about the navigation of the river at Kansas City. At that time the river men expressed apprehensions about the navigation of the river in consequence of the building of the bridge at Kansas City, but were not complaining. They were expressing apprehensions about the navigation through the draw. They were alleging that the piers were not located according to the act of Congress authorizing the building of the bridge, and this was discussed at the meeting in St. Louis. The river men said that the act required that spans of 250 feet should be placed on either side of the draw, and that the piers beyond the ends of the draw were nearer than they should be. They also claimed that, although it was 160 feet in the clear between the faces of piers Nos. 1 and 3 and the pivot pier, yet that, had the faces of the piers Nos. 1 and 3 been extended some 60 feet down or up the stream, then the distance at right angles would have been two feet less, but they did not lay much stress upon this point. This last allegation was true. A United States engineer examined the bridge and took its principal dimensions a short time previous to the meeting at St. Louis, which he reported to the Secretary of War. He made this examination in the summer of 1868, but I am not certain as to the date, and he made the report shortly after and before I went to St. Louis with Mr. Joy. I think he reported that if the line of piers 1 and 3 were extended the span of the drawbridge would be less than 160 feet in the clear at low water on each side of the pivot pier. That
82 was one of the facts which led to the conference at St. Louis, but not the principal one. As a result of the conference I placed the pontoons where they were placed above the bridge, the plan of which I suggested at the conference. The change in the position of the pontoons, to which I have above alluded, was made by the men in charge of the bridge, who moved the upper end of the pontoons according as the water rose or fell, the lower end remaining fixed at pier No. 1. I had charge of the men. There is a plan of the pontoon in my printed memo., which shows them to be floating and that there is water between them and the south shore, excepting as to the uppermost, the water floating under the pontoons

on the plan, which is according to all the facts at the time the pontoons were placed there. The outer line of the pontoons coincided with the outer line of the face of the pier No. 1. All testimony as to the current of the river and its direction relates to as it was between 1867 and March, 1873. I don't think if the pontoons were sunk in their original line they would affect the current; being in the thread of the current, the current would not strike them at an acute angle.

Q. Supposing sand or earth or other material should gather about the pontoons when sunk on that line, might not the current be thereby deflected?

A. It might; it might be deflected towards the first pier in that case. I have no knowledge of the sinking of the pontoons. I had charge of the bridge for a year or so after it was completed. It was part of the plan in the placing the pontoons that they should float, the object being mainly to keep them at the same hight above the water, so that the timber head would be available.

Redirect examination:

James F. Joy was the managing director of the Hannibal and St. Joseph railroad at the time the bridge was built, and a trustee of the Kansas City and Cameron railroad, and was the chief manager in the building the bridge and Kansas City and Cameron railroad; the bridge was a part of the railroad.

O. CHANUTE.

(Here follows diagram marked p. 82.)

83 *Keith.*

The plaintiff next read in evidence the deposition of GEORGE G. KEITH, which is in words and figures as follows:

Q. Do you know the steamboat St. Luke?

A. Yes, sir.

Q. Were you in command of her at any time in September, 1874?

A. Yes, sir.

Q. State how long you had been in command of her at that time and if anything happened to the boat about that time; state when and give the facts in regard to the matter as you know them.

A. I had been in command two or three months. Coming down through the bridge at Kansas City we struck the breakwater of the draw, which tore off our larboard wheel.

Q. Who was at the wheel at the time?

A. Bob Baily was on watch at the time.

Q. How were you coming down, stern foremost or head foremost?

A. Head foremost.

Q. How long had you been navigating in the Missouri river?

A. About 17 years on the river.

Q. Please state how it was usual and customary to come down through the bridge?

A. I always came through there head on; I don't believe I ever

backed through but once; I have been through a great many times.

84 Q. What condition was the boat in previous to her striking the breakwater?

A. She was in good condition.

Q. Can you state what the damage was—the particular damage done to the boat by reason of her striking the breakwater?

A. It tore down our wheel, broke the flanges; disabled us so we lost 12 or 15 days.

Q. Was she put in repair?

A. Yes, sir.

Q. Did you have anything to do with that?

A. While we were at Kansas City we built a bridge tree.

Q. Please state what, if anything, was done, and what was the cost of it?

A. We had carpenters from St. Louis, and built a bridge tree. I ordered our machinery from here and had to wait for that, and we put her in as good repair as we could till we got to St. Louis.

Q. State what was paid, if — know.

A. These bills were all paid at Kansas City.

Q. What bills are they?

A. W. R. Crawford & Co., $10.00 for lumber (paper hereto attached, marked Exhibit 1); G. G. Moore, $38.00, blacksmith work (paper hereto attached, marked Exhibit 2); John W. Merrill, $1.50 for lumber (paper hereto attached, marked Exhibit 3); U. S. Express Co., $62.00, for freight on flanges from St. Louis (paper hereto attached, marked Exhibit 4).

85 Q. Freight on them for bringing them up from St. Louis?

A. Yes, sir. This is for board. This is what the boat paid for eatables during the time we were laid up: $118.00 (paper hereto attached, marked Exhibit 5). A. C. Howard, carpenter's work, $19.50 (paper hereto attached, marked Exhibit 6). Joseph Burns, for skiff hire, $5.00 (paper hereto attached, marked Exhibit 7); that is all I know of. Stevens, for carpenter work, $68.00 (bill hereto attached, marked Exhibit 8). This is the bill for wages of the crew at Kansas City while the boat was lying there doing nothing; that is what was paid (paper hereto attached, marked Exhibit 9).

Q. That is all the expenses you know of personally?

A. Yes, sir.

Q. Do you know anything about the ordering of any goods or goods received where you don't know of the payment for them—any that were for repairing the boat?

A. I do not know who paid them. I know the goods were furnished to the boat. Collins & Holliday's articles were received there before I went away.

Q. You don't know anything about the payment?

A. No, sir.

Q. Will you please state whether any of these articles were used or any of this work that was done was new work or work
86 that would have been necessary if the boat had not met with an accident?

A. It was not necessary to do anything with her; she had just been repaired within a few month-; built new almost; she was in good order when she run into the bridge.

Q. Do you know anything about the damage, anything of what would be a reasonable price, a fair and reasonable price, for the use of that boat during the time she could not be used on account of this accident?

A. We had a very nice prospect of a trip down; I expect we would have made $1.200 or $1,500 on the trip down stream.

Q. How long would it take to make a trip?

A. We would have come down in about five or six days—four or five days.

Q. What would the charter value of such a boat be worth, if you know?

A. I think $100 per day would be very little for her at that time of the year; we would have made more than that.

Cross-examination by Mr. HOLLIDAY:

Q. How much would that be a month?

A. $3,000 a month, about.

Q. Do they make that with boats at that season, clear net money?

A. We ought to do it.

Q. How many months during the season could you do that?

87 A. I don't know; might do it every month.

Q. How many months during the season—how long would the season last of that kind?

A. Seven or eight months.

Q. What was the value of the boat at that time?

A. That boat ought to be worth $30,000.00 at that time?

Q. These nine vouchers of which you have testified, in whose handwriting are they?

A. The men that made out their bills.

Q. Did you make out any of them?

A. I did not.

Q. Did you yourself pay any of those bills?

A. I did not pay them; my clerk paid them.

Q. Which of those bills did you see yourself—stand by yourself and see paid, or were present when he handed the money over?

A. I saw all of the bills.

Q. Which did you stand by and see him pay?

A. I saw him pay this bill, Steven's bill, $68.00; I saw him pay Burns $500. I might not have been present when he paid them. I saw him pay the U. S. Express Company $62.00; I saw him pay G. G. Moore $28.00; I saw him pay John W. Merrill $1.50, and W. R. Crawford & Co. $10.00.

Q. How do you know, of your own knowledge, the other

88 bills were paid except from what the clerk told and the books show?

A. I could not tell unless I tell by the receipted bills; that is all the way I can tell.

Q. When was that bridge put across the river at Kansas City?

A. I believe it was completed in 1868; I am not certain.

Q. Have you been running up there every season since as captain?

A. Not as captain; I have been pilot.

Q. During what time since 1868 were you pilot?

A. I was pilot in 1869, '70, '71, and from that time I believe I have been captain on the Alice, Emilie, La Barge, & St. Luke.

Q. How often did you pass through this bridge, on an average, a month during the boating season of the years 1869, '70, '71, '72, '73, and '74?

A. I suppose it would average from five to six times up and down—that is, during the boating season.

Q. How long does the boating season last in that river?

A. About seven or eight months.

Q. How many accidents did you ever have happen to you?

A. That is the first accident I had with the bridge there. I have had one since; it is not worth while mentioning that one.

Q. How many times had you been through the bridge dur-
89 ing 1874, up to the time of the accident?

A. Well, I don't know; a great many times. I have been on the river every season.

Q. When does the season begin?

A. About March.

Q. How many times do you suppose you had been there that season before the accident happened?

A. Well, I suppose 25 or 30 times.

Q. And no accident either of those times?

A. No, sir.

Q. Did you have any barges in tow?

A. No, sir.

Q. What time of day did the accident occur?

A. Between 8 & 9 o'clock.

Q. Morning or evening?

A. Evening.

Q. How wide is the St. Luke from outside to outside, wheels and all?

A. I suppose she is about sixty feet.

Q. Which draw did you always pass through?

A. Next to the Kansas City shore.

Q. How wide is the draw there?

A. Indeed I don't know the distance between the spans.

Q. What rate of speed did you adopt—not this time, but generally—in passing through the draw?

A. I always came through head on.

Q. Was the night this accident happened on dark or cloudy?

A. It was moonlight and stars—a very pretty night; the moon was not down yet.

90 Q. How long preceeding this accident was the last time you passed through before?

A. We passed up that day and down that night.

Q. What difference was there in the piers when you came down from what it was when you went up?

A. I can't say what difference there was in the piers.

Q. Was there any change in the piers?

A. Not from the time we went up.

Q. What change was there in the current from the time you went up till you came down?

A. They had pontoons there.

Q. I am asking you of the change of the current from the time you went up till you came back.

A. I don't know now as there was any; there was no rise in the river.

Q. From the time of the accident back, how long since there had been any change in the current, or how long had the current been the same?

A. We had low water sometimes; the current had not changed much.

Q. Has there been any great change in *in* the current at the draw since the bridge was built?

91 A. I think two pontoons sunk that *that* winter, and their sinking it filled up below them and the current struck the head of the pontoons and it threw the current out on the breakwater.

Q. That was in the spring?

A. Yes, sir.

Q. There had been no change after that?

A. No; when the water was up it run over the pontoons; you could not tell much about them till the water got down; when it was down pilots were afraid of running close to them, for if you struck one of them it would destroy the boat.

Q. That was done in the winter?

A. In the spring when the water got down you had to guard against striking them.

Q. When does the water get down?

A. It generally gets down in August; the last of July it is down there.

Q. The pontoons were on the south?

A. Yes, sir.

Q. What distance is it between the pontoons on the south and the pier on the north?

A. The head of the pontoon extended up probably 100 feet above the pier where it made the break that would throw the current over on the outer breakwater.

Q. What distance was there between the pontoons and the pier on the north?

A. They were nearly on a line with the pier; the head of the breakwater would be between the two piers.

92 Q. From the piers north of the boat over to the pontoons on the south, how far was it from the pier over to the pontoon on the south?

A. From the shore?

Q. Yes, sir.

A. They were out in the river on the line with the pier. I suppose it was over fifty feet; it was more than that—75.

Q. What was the width of the passage through which the boat had to go through?

A. I don't know that.

Q. This pontoon was inside the shore pier; it was north of the shore pier?

A. It was just on a line with the shore pier; it extended above 100 feet.

Q. In that low water between those piers was there any place the boat could not go on account of low water the night of the accident?

A. No; you could go anywhere so you kept away from the pontoons.

Q. If you did not get on them you were in no danger?

A. No.

Q. And they were about on a line with the piers?

A. Yes, sir.

Re-examination:

Q. Those pontoons that were sunk were formerly there as guards so as to prevent a boat from striking the piers?

A. Yes, sir; when the pontoons were there I dropped through stern foremost; it was safe to go through then stern foremost.

Q. When the pontoons were sunk it was dangerous to go through the bridge?

93 A. Yes, sir.

Q. The danger was from striking a pontoon on the bridge?

A. Yes.

Q. Would it or not have been safer for the boats to go through if the pontoons had not been there at all?

A. Yes, sir.

Q. I understand you to state, as the water got low the pontoons would be up above the water and it would create a kind of breakwater there?

A. Yes, sir; it made slackwater below and formed a current out this way.

Q. At the time you went through, when this accident occurred, what, if any, danger would there have been for your boat to have gone through if the pontoons had been afloat?

A. There would not have been any danger.

Q. Please state what, if any thing, in your judgment as a pilot and steamboat man, could have been done that was not done in order to prevent the accident to your boat.

A. I don't know of any thing.

Q. How long had you been on the river as a pilot?

A. About 17 years. I piloted up to about 1872.

Q. Pretty steady work all the time?

A. Yes, sir.

Q. What kind of a pilot is Mr. Bailey?

A. He is considered a number one pilot.

Q. You have been asked some questions in regard to the
94 payment of bills, what the manner of payment of bills is on a boat. Who orders them paid, if you know?

A. The captain generally orders the clerk to pay them, and the clerk always pays them.

Recross-examination:

Q. You don't pretend to say the captain passes on the bills before the clerk pays them?

A. Yes, sir; the clerk always shows the bills to the captain.

Q. All the bills.

A. Not all of them; those he knows anything of he pays on his responsibility.

Q. Where were you at the time of the accident?

A. On the roof.

Q. Did you see the pontoons?

A. No; there was no pontoons there.

Q. No part of them at all?

A. None.

Q. Where were they?

A. The pontoons that were there were sunk.

Q. What became of them after they were sunk?

A. They were in the river; they tried to pull some of them out, but did not succeed.

Q. They were not visible at all?

A. No; there was one below visible.

Q. The one above there?

A. No; only they made a break; you could see the break, and that was all.

Q. Could you see that distinctly?

95 A. You could in daylight.

Q. How was it a moonlight night like this?

A. You could not see them.

Q. You could not see the break a moonlight night?

A. No, sir.

Q. Are you certain of that, that you could not see it in a moonlight night?

A. Pretty certain of that.

Q. Are you certain whether you saw it that night or not?

A. I did not.

Q. You are certain of that?

A. I am.

Signature waived.

Gaunt.

JOHN R. GAUNT, being produced and sworn on the part of the plaintiff, testified as follows:

Q. Where do you reside?

A. In St. Louis.

Q. What is your business?
A. Steamboating.
Q. How long?
A. Twenty-one years.
Q. Where?
A. On the Missouri river principally; on Southern rivers in the winter time.
Q. How were you engaged in March, 1874?
A. I was clerk on the steamboat Alice.
Q. Where were you on the 4th day of March, 1874?
A. I was on the Alice on her first trip up.
Q. About what point?
96 A. I suppose that was the day we had the accident at the bridge. We passed up the night before to Wyandotte, and was on our return trip.
Q. What position had you on the Alice?
A. I was clerk on her.
Q. You say that was the first trip of the boat up that season?
A. That season—yes.
Q. What happened, if anything, to the boat?
A. We collided with the upper draw rest of the Kansas City bridge, tearing away our larboard wheel and disabling the boat.
Q. I'll get you to state where you were all the way down from Wyandotte.
A. I was in the office part of the time, and part of the time on the guards. The office was what we called the front office. I was at the window part of the time.
Q. Just immediately before the accident?
A. I was standing on the boiler-deck guards on the larboard side.
Q. State how the boat came down and how the accident occurred.
A. We were coming down the river in the usual course, and I was looking out occasionally and walked out once or twice between Wyandotte and the bridge. When we were about fifty yards above the opening of the bridge I walked out on the boiler deck to see her position. That was usual. When I first walked out to notice how she was headed my impression was she was headed right,
97 and as we neared the upper draw rest I looked back to see the position of the stern of the boat, as we call it, and I noticed her swing around towards this upper draw rest. We struck it forward of the wheel a few feet, tearing away our larboard wheel.
Q. What became of her?
A. She passed through the bridge and we landed her at Harlem.
Q. What became of her wheel?
A. It did not fall off entirely, but swung down in the water; we landed her with her bow down stream on the Harlem side.
Q. What was the condition of the river at that time?
A. You mean in regard to the water?
Q. Yes.
A. There was medium water.
Q. In regard to ice?
A. There was some.

Q. How long had you been out on that trip?

A. I don't remember. I suppose some 3½ or 4 days after leaving St. Louis—maybe five; I don't remember exactly.

Q. How was that ice—not enough to affect navigation?

A. No, sir.

Q. Did you notice any effect of the ice after you passed through?

A. The ice did not affect us at all.

Q. I'll get you to state whether you made any examination
98 of the condition of things about the bridge immediately after this accident and when it was & what it was.

A. I don't remember whether it was the same afternoon; I think it was this same evening. I had occasion to pass over the river to do some telegraphing and I stopped on the bridge and was noticing this rapid current; this current deflected from the head of these pontoons over towards the upper draw rest and the pivot pier.

Q. Describe the current and what indications there were.

A. I noticed these pontoons were sunk. I don't remember but one being in sight; the head one was partially sunk, but the head being fast to a chain was still in view, and the current seemed to strike these pontoons that were sunk, and the current deflected over to the draw rest with a roaring noise.

Q. Did you go down by the side of the river?

A. No, sir. I stood on the bridge.

Q. I'll get you to state if you had seen these pontoons before.

A. Yes, sir; the fall of the year previous they were there in position; I had noticed them.

Q. Could you tell from the way the pontoons lay how it was sunk?

A. It seemed to me that it was quartering a little down the river, and seemed to be laying out a little this way.

Q. The upper portion of it in sight?

99 A. Yes, sir; that is my recollection of it now.

Q. You say there was some ice running in the river. How was that boat with reference to this ice?

A. We were going down through what ice there was—coming right down the usual channel. I never gave the ice a thought as impeding navigation; it made no impression on my mind.

Q. How frequently had you been through that place before?

A. I have been through there every week or two for a number of years—since the bridge was built.

Q. What action had you taken to notice the passages which you made through there? I wanted to know whether you had given any attention to the boats as they run through there.

A. I frequently walked out to see them go through, and always, when I was not otherwise engaged, I went out.

Q. Where did you see this cross-current strike out?

A. From the head of where the upper pontoon was.

Q. And struck out to about what point?

A. It deflected out toward the draw rest.

Q. What was the condition of that boat before the accident?

A. She was sound & seaworthy in every respect.

Q. Do you know that she had been recently repaired?

100 A. I think she had been repaired that winter or spring; they generally repair them during the winter.

Q. Do you know anything about the expenses of repairing her?

A. Yes, sir.

Q. I'll get you to look at these bills and state what you know in regard to them, what was done, & when was the boat repaired.

A. We landed on the north side of the river at Harlem and commenced repairing, getting ready that same afternoon for repairing. This first voucher is for the officers & crew which we had —entire wages at the time—and captain ordered me to pay off all that we would not need for repairs the next day. The first is for ½ day for all these men; it is $22 and something; the cents is torn off; and here is a list of wages I paid; what crew retained during the time we were repairing 12 days; they were retained to assist in repairing—the engineers and mate of the boat and the watchman, the deck crew as are named; there are six or eight of them. We kept the stewart. We had to keep the watchman all the time. We kept our carpenters, engineers, and strikers and four firemen and three deck hands and three roustabouts—men of all work. This voucher amounts to $360.30. Here is a voucher for $39.09, paid John W. Merrill for lumber necessary to make these repairs. We hired a carpenter at

101 Kansas City, this six days' work at $3.00—$18.00. Another carpenter, W. C. Steine, he was employed six days @ $3.00—$18.00. Here is a voucher for W. H. & J. W. Harrison for the main timber required for the repairs; we had to get it sawed in the mill; it is $144.08; we got a reduction, leaving $132.40. Here is a bill of Collins & Holliday for two wheel flanges and some other things, $109.58; there were two flanges broken and we had to send to St. Louis and get new ones instead. Voucher, Lowell, for paints and oils, $10.00; this was paid by Captain Ateo. I did not get this bill until the boat arrived in the city—a little bill for $2.50, for blacksmith for making a band. I paid the St. Louis, Kansas City & Northern Railway Company $6.80 freight on these two flanges; Mr. Jarboe, for some iron, $3.18; Jno. W. Merrill, for lumber, $1.80; Phil. Kroun, in Harlem, .50 for candles and oil; $2.40 paid for telegraphing; horse hire down to the saw-mill, .50c.; $1.00 for drainage; Capt. Ryder had to go down; we had to employ a ship carpenter which we brought from St. Louis; we paid him for ten days' work at $4.00—$40.00, and his passage, making in all $58.00. Here is a voucher for the crew while repairing the boat, $172.75; this last voucher is the one explained for the crew; that is for

102 the board of all the hands that were engaged on the boat; the captain thought it would be cheaper than to board them out in town.

Q. What is the charter value of that boat?

A. I should say about $100 per day.

Q. You say that was the first trip; was there any particular value in the first trip?

A. We looked on the first trip as being the most profitable, owing

to the accumulation of freight during the winter; it used to be a great struggle with the boats to get out first.

Q. How many days were you laid up?

A. Twelve and one-half days; the accident occurred on the morning of the 4th and we left on the morning of the 16th.

Cross-examination:

Q. Did you ever give your deposition in this case?

A. Yes, sir.

Q. Do you remember when?

A. It was some time ago; I don't remember exactly the time; I think it was about a year after the accident; perhaps not so long.

Q. It was in March, 1875, I suppose, was it?

A. It might have been about that time.

Q. Did you state anything about that roaring noise in that deposition?

A. I can't remember whether I did or not; I am of the impression I did; I don't remember that.

103 Q. Did you in that deposition state anything about noticing the cross-current then?

A. I think I did.

Q. Did you notice the pontoons as you went up?

A. No, sir; we passed up in the night. I don't remember positively about the time; it was between 12 and 2 o'clock. I did not notice the pontoons as we came down; I was on the opposite side of the boat as we passed through the bridge; what we call the boiler deck—that is, the main cabin deck; the deck as you go out of the cabin.

Q. What do you call the lower deck?

A. That is the main deck.

Q. What part of the boiler deck were you on?

A. I was forward of the cabin about fifteen feet.

Q. Do you mean to say you were on the front side of the boat?

A. Yes, sir; I was facing away from the larboard side; I was facing north, looking sort of quartering down the river, watching the boat as she went through.

Q. Well, there was some ice floating when you came down?

A. There was some.

Q. Was there any in the night?

A. I could not say as to that.

Q. Can you tell about what time the ice broke loose?

A. We met a little running in all that day; it never bothered us any; it was not running very full the next day; there was a little more ice that day than the day before.

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Q. Which side of the floating ice did you come down on?

A. We came right down through the ice.

Q. You did not go on one side of it?

A. We did not; the principal portion of it was hugging the Kansas City shore; we came right down through the ice and the usual channel; I don't remember that the north side was free of ice.

Q. The channel follows the Kansas City shore from the Kaw?

A. It does.

Q. There is a big bend there, ain't there?

A. There is a bend there, not a very large bend, not enough to make a semicircle.

Q. What stage was the river?

A. It was not high nor very low; it was a medium stage of water.

Q. How far out from the Kansas City shore was the boat, say 100 yards above the upper draw rest. How far did you stand out in the stream?

A. I can't say that I remember exactly; as I was walking out the boat was headed for the opening in the piers.

Q. How near to the upper draw rest was the boat when you walked out?

A. My impression now is about fifty yards; probably not so far.

105 Q. Did she change her course then?

A. Her bow was going as straight for the opening as she could. When I walked out I looked back to see the position of the stern of the boat and noticed her swinging around.

Q. How far was her bow past the draw rest as she struck?

A. About twenty or thirty feet; maybe more than that.

Q. And then it was you noticed her commence flanking around?

A. I looked back to see the position of the boat and then I saw her swing around. My impression was that she was headed right.

Q. She was then headed for the middle of the draw, was she?

A. Yes, sir; as I remember, when I walked out on the boiler deck.

Q. Why did you step out?

A. I generally do to see the boat go through.

Q. Why is that?

A. It is from different reasons. If you were a passenger on a boat you would go out to see her go through. It is merely a habit with me. I go out when I go through the Booneville bridge.

Q. Did you state in your deposition that you apprehended danger?

A. I might have said that; we generally go out when passing — boat to see that everything is all right. We always apprehend

106 danger when passing through a bridge; no particular danger apprehended that morning. There is always some danger apprehended.

Q. Did you ever go through the draw stern foremost?

A. I think I have, once or twice.

Q. When you went through stern foremost what did you do?

A. One time we dropped alongside of these pontoons and dropped and backed through.

Q. You could always go through safely?

A. I never considered it safe in passing the Booneville bridge.

Q. We are not talking about the Booneville bridge.

A. When the pontoons were there we always considered it safe to drop through.

Q. Did you see the pontoons on this occasion?

A. I did not. I did not look for them nor think of them.

Q. Did you notice any cross-current between the shore and the draw rest and the pivot pier at the time of the accident?

A. No, sir. I did not notice any as we went through.

Q. When was it you noticed any current there?

A. It was that same afternoon or the next morning. As I passed over the bridge I stopped and took a look at the situation.

Q. How did you know the pontoons were sunk?

107 A. I saw the upper one was sunk—a part of it in view—the greater part of it was sunk. It was laying quarterly down the river and its head resting on the bank. It might have been a little turned up. It was not floating. I did not notice any below it.

Q. If the pilot had looked out he could have seen they were missing—if he had been looking out he could have seen them?

A. I suppose so.

Q. He could have seen this one that was turned up?

A. I suppose so. The others were sunk, and I suppose they were not in view.

Q. You could not see but the one from the top of the bridge?

A. I don't know whether any of them were there. I was on the bridge. I only saw the upper one that I remember of.

Q. I'll ask if, in your deposition taken in this cause in St. Louis, 21st March, 1875, before Chas. E. Weller, notary public, if you amended this question as follows: "Q. How were the pontoons next morning?"

A. As near as I can recollect now, the upper portion of them were in sight.

Q. How long had they been in that condition?

A. I don't know, sir.

Q. Was that your answer then?

A. I don't know that I understand you.

Q. The question here is: "Q. You saw the pontoons next morning?"

A. Yes, sir.

108 Q. How high were they above water?

A. As near as I can recollect now, the upper portion of them were in sight. I made that statement. I meant the upper portion of the upper pontoon. I did not mean the upper portion of all the pontoons. I admit making this statement.

Q. I believe you have stated that you heard a roaring noise made by this cross-current at the time you were on the bridge?

A. Yes, sir.

Q. This was the next morning you heard the noise?

A. It was that afternoon or the next morning.

Q. How loud a noise was that?

A. I don't know how I can answer that question. I could hear it distinctly when I stood on the bridge.

Q. How far was that from the roaring noise?

A. I suppose it was some three or four hundred feet.

Q. What kind of noise was it?

A. It was a roaring, hissing noise. such as would be made by a strong current of water.

Q. Does the current in the Missouri river make a noise?

A. Where it strikes a bend sometimes it does.

Q. Strikes the bend in what way?

A. When it strikes a snag. You can tell the location of snags in that way—hearing the water washing over it. It is loud enough for a pilot to hear it.

109 Q. If this current makes such a noise why can't the pilot notice it in coming up—is there anything to prevent him if he had been looking out? Who was on guard as you passed up?

A. I think Tebeau was on guard as we passed up.

Q. State the distance the boat stood out in the stream when it was one hundred yards above the draw rest.

A. I can't answer that question. I noticed her most all the way down from Wyandotte; as to the distance she was out, I could not state.

Q. Was there anything to prevent the boat from going through the north draw?

A. I don't know of any obstruction; I never went through the north draw in my —. I don't know that the channel is deeper on the north side.

Q. Isn't there a rocky shore that runs up six hundred feet above the bridge?

A. It is a rocky shore.

Q. That forms part of a curve coming round from the mouth of the Kaw river—this rocky shore forms part of the shore as you run down from Wyandotte?

A. The bend is all riprapped around; I *down* know how far the rocky shore extends above the city.

Q. The bend is pretty deep after you get up in the bottom.

110 A. Do you mean scooped out a good deal?

Q. Yes, sir.

A. I think the riprapping would prevent it from deepening. There is somewhat of a bend up there; I don't think it is a very deep bend.

Q. You don't recollect very distinctly about it, do you?

A. It is two or three years since I was up there.

A. Isn't the channel washed in there some ways till the channel is south of where it used to be?

A. I don't know about that.

Q. Do you know about — pile of rocks that is now on the north shore that used to be on the south side?

A. I don't know about that; I dont remember of ever seeing that pile of rocks.

Q. It is on the north side of the channel above the bridge three or four hundred yards.

A. I don't remember of ever seeing it.

Chanutes' map shown witness.

WIT.: I never noticed that pile of rocks; I never heard of it.

Tebeau.

JOSEPH E. TEBEAU, being produced and sworn on the part of the plaintiff, testified as follows:

Q. What is your business?
A. Piloting on the Missouri river.
Q. How long have you been pilot?
111 A. About 28 years now.
Q. How were you engaged in March, 1874?
A. I was pilot on the steamboat Alice. I took her from St. Louis to Wyandotte.
Q. Who was with you?
A. Captain Wright.
Q. You took charge of her from Kansas City to Wyandotte?
A. I did; I was on the watch.
Q. How was the river as to ice at that time?
A. There was no ice in the river when we went up through the bridge.
Q. What stage of water was there?
A. I suppose about medium.
Q. How far up did you go?
A. To Wyandotte.
Q. Do you know when the ice broke up?
A. Yes; after we passed through the bridge the ice commenced running down the river. We went up the morning of the 4th, and just after we passed through the bridge we met some ice coming down the river.
Q. On the way up from St. Louis how had the river been as to ice?
A. We were detained at Jefferson City for four days; there was no ice the day previous we got to Kansas City?
Q. How long were you out from St. Louis when you got up to Kansas City?
A. About nine days. I can't say positively whether it was nine or ten days.
112 Q. Had the ice gone out of this part of the Missouri river when you left St. Louis?
A. I could not say about this part of the Missouri river. I did not see it. There was no ice in the river when we left St. Louis.
Q. What time did you come down from Wyandotte?
A. About half past eleven in the morning; there was some ice in the river then. I did not see that it affected her in any shape or form.
Q. State what, if anything, happened to your boat as you came down.
A. In coming down through the draw she flanked over on this draw rest and tore her larboard wheel down.
Q. Where did she strike the draw rest—what part of the draw rest?
A. She struck it in this quarter, right here (shows indicating

southwest corner); she struck right before her larboard wheel, tore her water wheel off, and the wheel hung down in the water.

Q. I'll get you to state, if you had the boat, what position you had here—what is the proper position to bring a boat down the bend through the draw.

A. I came down the bend as I had gone with other boats—down the shore all the way—and just about before she entered the draw she was headed for the south pier—towards the south pier.

Q. What position was she in in the channel?

113 A. She was coming down the shore, as I stated before, in the channel of the river, as I had come times before.

Q. You say she flanked. What do you mean by that?

A. I mean by a boat going sideways against anything out of her usual course; flanking is a boat going bodily sideways. (Witness explains on map the course the boat took in coming down the river.)

Q. How long had you been in the habit of taking boats through that draw?

A. I had gone through there every season since the bridge was built. I could not say how many times I took boats through. I was on the river from 1849 to the spring of 1874, and then left the river for the balance of that season, and I was on in 1875 and 1876 and this season.

Q. What was the usual manner in taking a boat through the draw?

A. Before the pontoons was there we came down head foremost. I used to come down that way with the pontoons; we would come down sometimes with the pontoons; generally we came down head on.

Q. I'll get you to state what you know about the north draw.

A. I never took a boat through there. I know nothing about it.

Q. What do you know of the custom of going through there?

A. I never heard of anybody going through there.

Q. What is the shape of the sand bar on the north side?

114 A. Gradually goes round in a bend; it is sand bar on the north side above the bridge; it is Willow sand bar.

Q. Is it a permanent bank or shifting?

A. It is not a stationary bank; some willows & sand.

Q. Do you know the reason that the north draw is not used?

A. There is various reasons; some might have more reasons than others.

Q. Do you know any reason for not using it?

A. A man coming down the usual channel with a steamboat he would have to get his boat out of her usual way to get her in shape to go through that north draw, and in doing so she might get herself out of course; that is the reason why I never attempted to go through there.

Q. I'll get you to state if you know what was the cause of that flank movement.

A. I don't know but one cause, and that was the pontoons sunk along side of this rock shore; they were laying there then; that, I think, was the cause.

Q. Had you ever seen those pontoons there in position?

A. Yes, sir.

Q. What was the condition of things that caused the accident; what happened to the pontoons?

A. I could not see but one; that was the upper one; this upper one was—a portion of it—up out of water. I could just see
115 the upper part of it; upper part was against the rock; it lay out diagonally; the other ones I could not see.

Q. How was the current before the pontoons sunk?

A. The current came down the shore all the way. I could not see any difference in the current there; the current just swept down this shore all the way; the current passed right down past Kansas City.

Q. At the time of the accident how was the current?

A. It struck out from about this point here (indicates from pontoons) and went out in this direction (shows), against this draw rest (indicates upper draw rest). I never knew any cross-current here before these pontoons sunk.

Q. Do you know how the water had been under the pontoons into the shore?

A. There was always water there; I could not say how deep it was.

Q. Do you know how it has been since?

A. There has a bar been forming there in low water since.

Q. How far out?

A. It extended in a line from the south pier to a point up here (shows); before the pontoons sunk there was a current all the way down there and a clean rocky shore.

Q. What became of the boat after the accident?

116 A. We landed her at Harlem; we went through the draw; her wheel out in the water; it was unmanageable; we managed to fasten her there with her head down the river.

Q. I'll get you to state if the ice interfered with her navigation, either before or after the accident.

A. No, sir; the ice did not interfere with the navigation of the boat that I could see.

Q. How was it about using your paddles in the ice?

A. I did not see any difference.

Q. Where was the boat when she commenced this flank movement?

A. She was in the draw when she flanked there—not in the draw—her head was nearly opposite the pivot pier when she flanked there.

Q. Did you make any particular examination of the place after?

A. Yes, sir; a couple or three hours after I went upon the bridge and looked at the current.

Q. What had these pontoons been there for when they were floating?

A. We used them to drop down with—going down with a boat—in case the wind was blowing or at night.

Q. How would you drop them?

A. Some would put out lines and some would not; I never put out any lines.

Q. In reference to going through this north draw, is there any difficulty in running a boat close to the sand bar?

A. Yes, sir; she might run off from the bar; a boat run-
117 ning close to a bar and working her wheels she becomes unmanageable; she goes for the deep water.

Q. What was the width of that boat?

A. She was 35 feet beam, and her wheel was ten feet; her entire width would be about 60 feet; her length was 225 feet.

Cross-examination:

Q. Were you on watch as you passed up through the bridge the night before?

A. When I passed through I was on watch.

Q. Did you notice the cross-current about which you have spoken as you passed up?

A. I did not.

Q. What was there to prevent you from noticing it?

A. It was dark and I could not see the draft of water.

Q. Can't you feel it?

A. I did not feel it; the only reason is that a boat going up stream she is not as liable to go with the current as coming down stream.

Q. What reason is that?

A. She might have been in such a shape in coming up that I could not feel it; I feel it coming down; I felt it distinctly in coming down; I felt it when she struck; I had no idea there was any cross-current; I did not know she was flanking; I thought she was all right till I heard the crash.

Q. What time did you leave Wyandotte?

A. About half past eleven.

Q. The ice was running full when you left Wyandotte?

118 A. There was some ice in the river.

Q. There was a good deal more running when you left Wyandotte than there was when you went up?

A. Yes, sir; there was more.

Q. You ran over on the north side of the floating ice, didn't you?

A. I came down in the main channel all the way; I did not set over on the north side of the channel coming down; I came right down in what ice there was; it interferes with a boat when the ice is heavy; this did not; I could not tell how heavy the cakes were.

Q. There were some pretty good-sized cakes floating?

A. Not as big as I have seen; there might have been some as big as half that table; I could not say how thick they were; I observed the ice in the river, but I did not observe the thickness; I don't think they were a foot thick; I don't think any were as large as that table.

Q. When you were, say, 150 or 200 yards above the draw rest, didn't you have the bow of your boat pointing towards the draw rest?

A. She was pointed towards the south pier; she never pointed that way at all.

Q. How near the draw rest were you before you turned south-east?

A. I could not say how near I was; I suppose 250 or 300 yards.

Q. Before you made this turn wan't it turned to the draw rest?

119 A. No, sir.

Q. How far did your boat stand out from the Kansas City shore 250 yards above? How far out in the river were you?

A. I could not tell exactly; she might have been out a width or a width and a half of the boat; when she got down closer to the bridge she was closer to the bank. As she approached the draw she, of course, got in close to the south shore. I might have been one hundred and fifty yards in making the time. To get in you have to go in close to the shore. I was 300 or 350 yards above when I made the turn to come in. I don't think it was less than that that I made the turn to come into the south draw. I think it was further than 200 yards. I cannot tell exactly how far it was. I don't think it was less than 200 yards. Before she turned she was headed down the bend, pointing for the draw of the bridge—for the south draw of the bridge; she was never pointing for the head of the draw rest.

Q. When she was 300 yards above how far out did she stand?

A. Probably she might have been the width of the boat. When you go through the draw you have got to be pretty near the shore. As I turned her in, I think I was about a width of the boat from the shore. I might have been closer than that.

120 Q. I'll ask you if in going through the south side of the draw with safety you ought not to have turned in sooner?

A. I don't think so. I got down as near shore as I could judge.

Q. I'll ask you now if you didn't go through on the north side to escape the floating ice?

A. I did not; there was more ice on the south side than on the north side. The surface of the water was not covered with ice. There was a space where there was no floating ice. It was all scattered through there.

Q. Did you see the pontoons as you went up the night before?

A. I did not.

Q. Did you look for them?

A. I did not look for them. I saw a portion of one of them lying on the bank when I came down. I was past it when I saw it. I had made up my mind to go through head foremost. I could get my shape to drop down about 600 yards above. I saw there were no pontoons when I went up. I saw a portion of one when I got past it. If I had seen the pontoons there I would have rounded to.

Q. You now say there was only a portion of one pontoon in sight?

A. Yes, sir.

Q. I will ask you if you gave your deposition in this case on the 4th day of September, 1875?

121 A. I think I did; I don't know the date I gave my deposition in this case.

Q. I'll ask you if this question was asked you: "Q. Were these pontoons in sight anywhere when you came down? A. A portion of them; they were lying against the bank on the Kansas City shore, above the inside pier?"

A. I mean by a portion of them I did not know how many were there. I did not know whether they were attached to one another or not. I might have said that, meaning they were attached to one another.

Q. Was that your answer to the question?

A. That is my answer to that question. I did see a portion of them in sight when they were afloat. I could not say how many there were; I never counted them. I have used them, but never counted them.

Q. I'll ask you now if the river don't make a large bend from Wyandotte down to a short distance above the bridge?

A. There is a big bend in the river.

Q. Don't the current flow in against that bend?

A. Yes, sir.

Q. Isn't there a rocky shore from the bridge up 600 yards?

A. Yes, sir.

Q. Doesn't the bend terminate about 250 yards above the bridge, and then the shore run in a southeast direction?

122 A. It makes a curve there.

Q. How far above the bridge does the bend stop—where the point of rock is?

A. It is all rocks there. I don't know of any particular point of rocks. You might call it a point of rocks, but I wouldn't call it that. There is a rocky shore all the way down there. I would call it a round curve of a bend; some might call it a blind point. I would not call it a point. It is just a natural shore around the bend.

Q. How far is the foot of the bend above the bridge?

A. Probably three or four hundred yards; I could not say exactly; it is about five hundred yards. This rocky shore makes a turn there. I could not tell the exact point; it is a natural round there. Along past the bridge it is tolerable straight. It makes a sort of turn to the southwest there. I suppose about three hundred yards above the bridge, when it makes that turn to go into the bend.

A. And the water deflects from there out to the draw rest?

A. I never noticed it. It sweeps down that rocky shore—down to the bridge. I never saw it before these pontoons were sunk there. The current always came right down by the shore. There is no deflection out to the draw rest. In some points there would

123 be a deflection, but not there. The bend is not deep enough to throw the water out. Where the water strikes a thing very square it would be deflected. It depends on the angle whether there would be any deflection.

Q. Don't the current of the river coming into this bend flow over there to the head of the draw rest?

A. Not that I know of.

Q. Is not that the cross-current that flanked your boat?

A. No, sir; it is not; got way down below that and had got into the draw before this other current caught her and flanked her on the draw.

Q. How far from pier No. 1 was the current formed by the point of the pontoons?

A. Probably one hundred feet or one hundred and fifty from that south pier; can't tell exactly. I would discover the current leading out from that.

Q. Do you know how far it is from the pivot pier up to the nose of the draw rest?

A. No, sir; I never measured it.

Q. Do you know how wide it is between the pivot pier and south pier?

A. No, sir.

Q. Do you know the depth of water there?

A. I do not know anything about the depth of water there.

Q. Did you know the size of these pontoons?

A. No, sir.

124 Q. Suppose the pontoons were five and a half feet deep and down in the river fifteen to twenty feet deep, how could the sinking create a cross-current?

A. If they were that deep in the river they would not create any cross-current; the water would flow over them. If they were that deep in the water the water would go right over them. They would not make any difference in the current if they were that deep.

Q. When you went up the night before did you discover any difference in the current?

A. I went up that morning; I did not discover any cross-current; I don't think I could have felt it if there had been one.

Q. How close did you hug the Kansas City shore going up?

A. I think I hugged it a little closer than when I came down; I could not say that I was closer; I went by the shore all the way down.

Redirect examination:

Q. You say you would not be as likely to notice the cross-current at that point going up as you would going down from feeling it; will you explain that?

A. I might have had the boat shaped in such a course that I could not feel it. When you go through the draw you aim to hug the Kansas City shore all the way.

Recross-examination:

125 Q. Did you put steam on when you went through the draw?

A. I put on steam till I got down to the draw. She was running with a full head of steam. What we mean by belching is to put her to the utmost capacity. I did not belch her.

Redirect examination:

Q. Mr. Car spoke to you about turning her in. I wish you would explain to the jury how much of a curve there is in the rocky shore above and how far up it is before you get the boat exactly straight to go through the draw. How far above the bridge do you get your boat to run straight through the draw?

A. In coming around that curve it is about three hundred yards.

The plaintiff next read in evidence the deposition of E. W. Gould, which is in words and figures as follows:

E. W. Gould.

E. W. GOULD, of lawful age, being produced, sworn, and examined on the part of the plaintiff, deposeth and saith:

By Mr. LADD:

Q. Captain, please state your residence and age.

A. Residence, St. Louis; age, 65.

Q. How are you connected with the Missouri Packet Co.?

126 A. I am president of it and have been for several years.

Q. Have you ever been engaged as pilot or captain on steamers on Western waters?

A. Yes; I have been master of boats for many years.

Q. What rivers?

A. All the rivers of the West and South.

Q. How long experience have you had?

A. Forty (40) years.

Q. Do you know the railroad bridge across the river at Kansas City?

A. Very well.

Ques. I will get you to state whether, during the construction of the bridge, there was a conference held between the river interests and the railroad interests in relation to the manner of its construction?

Ans. I had several conversations with the engineer myself at Kansas City while the bridge was building.

Ques. State whether there was a conference in St. Louis between the representatives of the river interests and the managers of the bridge.

Ans. After the construction of the bridge a delegation, consisting of the principal engineer and the president of the company, Mr. Joy, came to St. Louis for the purpose of compromising or reconciling an opposition that was had to the bridge with the river interests. The river interest claimed that the bridge was not built in conformity to law and was detrimental to navigation. Through some apprehension of future results these gentlemen came to St. Louis, applied to the president of the chamber of commerce for action or some expression of the views of the chamber and of the river interests, which were identical. The president of the chamber appointed a committee to meet this delegation, Mr. Joy and Mr. Chanute, I

think, and I don't know whether there were others or not, but both of these gentlemen were present, at any rate, and the conference was had with these gentlemen. Quite a number of Missouri river boatmen were present. The subject was stated and they were asked—the river interests—to state the objections that they had to the bridge, which they did as briefly as was consistent, and a general expression and conversation ensued, resulting in a proposition from the bridge interest, Mr. Joy, to protect the passageway, the draw in the bridge, by either driving piles from the pier, the first pier next the draw, up to a point above, or placing pontoon bridges or boats along up, forming a bulkhead, as it were, for boats to land in passing when there was danger of drifting against the draw rest or draw, both being equally objectionable.

Ques. Had the representatives of the river interests been making complaints in regard to the bridge which led to this council?

127 Ans. That was what brought them here; charges and objections raised and apprehensions felt all the time as to the construction of the bridge, whether it was in the proper place, or whether it was inconsistent with the charter, or whether it was a legal structure, and apprehending all the time danger of opposition, was what brought them here.

Ques. Well, state the substance of the conversation between the representatives of the two interests at this conference in regard to the pontoons or the line of piles you have spoken of?

Ans. A proposition came from Mr. Joy to overcome any objections to the character of the draw and the danger to navigation; and a compromise or proposition, as I stated before, came from him to avoid any difficulty of that kind that might be apt to arise in practical navigation, and he asked if that would be satisfactory. The answer*ed* to that proposition from the river interests was that a piling driven would be more substantial, more effectual, and more satisfactory; but they objected to doing that, or proposed in lieu of that that they had several flat boats which they had used in the construction of the bridge, and they could very much more easily and cheaply place those in position and chain them together, making a line of them and spar them out by long spars from the shore, and hold them on the line of the pier, and submitted whether that wouldn't answer, as navigation was not yet resumed; this was in the winter, navigation was about to be resumed, or would be in the spring, and it would be difficult for them to drive piles, and they might not succeed—as it was near the shore—they might not succeed in making them sufficiently permanent until the water should come again, as the river would probably open high in the spring, and submitted that this mode of protecting the approach from above to the draw should be substituted by pontoons instead of the piling, as was suggested by the river interest, and it was with that view that the delegation had visited St. Louis. It was finally agreed that if they would place a good line of pontoons out on this line, within the north side of the inside pier, forming a bulkhead from the pier up to the point, and keep those pontoons in place, that they would accept them as a substitute for what they believed the better thing—that

is, the river interests believed to be the better thing—that was a line of piling, they to keep the boats intact—keep them sparred out—which was some sixty or eighty feet from the shore in high water, and they were to keep the ends of the boats chained out by spars—keep them chained together—and make a formidable thing to land against. That having been agreed upon, as on their part—that is, on the part of the representatives of the bridge—and so long as they kept them in order and made it accessible for boats in that way, that no effort on the part of the river interests would be made to disturb the bridge, which the river interests claimed was an illegal structure, and so recognized by the principal engineer—so admitted by the engineer.

Ques. Captain, those pontoons—it was contemplated that those pontoons should be kept floating in the water?

Ans. Yes, sir; of course they were to be kept in the water, so sparred out as to form a reasonable landing for boats either to "cordell" up through or to drop down along.

Ques. State what was said, if anything, by the representatives of the river interest at that conference in regard to the difficulty of keeping those pontoons in their proper place.

128 Ans. Yes, that was discussed; that was understood. The objection was raised to them as to their being temporary, they might be liable to sink, might float out of place and be useless, and the engineer stated positively that the pontoons would be kept in order; that they would be responsible that the line of pontoons would be kept in position by spars; kept afloat by necessary means, and in this evidence here as you have it I think he states all that, corroborating my recollection.

Q. Who constituted that committee on the part of the chamber besides yourself?

A. My memory doesn't serve me; I can't say that I remember but one gentleman; that was Captain Henry Smith, who was formerly a boatman on the Mississippi, and was then president of the St. Louis and Memphis Packet Co. I don't known who else was there; I think Captain Joey was present at one meeting, I know; I am not certain whether it was then or not.

Q. State whether you have examined or noticed the current of the river above the bridge since the pontoons sunk.

A. Yes; I have been several times to Kansas City since the pontoons sunk, and the effect to my mind is very apparent, even before I saw it, and very positive after I saw it, that the pontoons formed an obstruction in the river which turned the course of the current; as a matter of course, everybody who knows the effect of sinking in the Missouri river knows that they form a strong obstruction

129 around which a large amount of deposits always accumulated and forming ultimately a bar. The smallest obstruction sometimes have a tendency to form a little eddy under it.

Q. State what, if any, effect on the current the sinking of those pontoons has had.

A. Well, it has had the effect of filling up that shore all the way

down from where the pontoons sunk to an indefinite distance below the pier. I don't know how far.

Q. What effect has it had on the current?

A. When an obstruction is placed in the river the current shoots off. It fills up and ultimately deflects the current. It could have but one effect, and that would be to change the current. An obstruction at that point would throw the current towards the north shore of the river, right diagonally across the draw, and instead of the water running down through, as was contemplated originally, and which did partially reach that contemplation—never perfectly—it has now had the effect of filling up the shore and channel along the shore over which the draw hangs, and thows the water diagonally across the draw which we call a draw rest. The map, as drawn by some one of the representatives of the bridge, represents the whole thing very correctly to the court and jury.

Q. State if during the construction of the bridge you had any conversation with Mr. Chanute, at Kansas City, in regard to
130 the water. You examined the bridge in company with him.

A. Mr. Chanute, through his politeness & uniform courtesy, invited me, perhaps, more than once—I know once anyway—I state positively he invited me to go with him, and some men took us out where he was building the piers in the early construction and showed me how unfortunate they had been in laying the foundation — the ca-ssion of one pier, saying that they were anxious to get the bridge finished, and he proposed to build the pier fifty feet further east rather than undertake to recover what had been lost in the first — in the destruction of the first pier, and asked me what I thought of it—asked me how I would regard that. I stated to him that of course it was a clear violation of the charter. He said he understood that instead of being 250 feet, as required, it would be about 200 feet. So far as practical steamboat navigation was concerned, they didn't feel that the bridge would be a violation of the charter; that, so far as passage of steamboats is concerned, it would have no effect, but for rafts and flat boats or anything flat, of course it would obstruct the channel at that point, but they would take the chances of building—of building this pier at some future time, the water being now too high, and we couldn't wait until the water fell before we
131 reconstructed this pier in the proper place, we will take the chances of any damages that shall accrue, so far as that is concerned. Then I said my opinion, of course, is that any influence you use to have this pier built fifty feet east, or whatever the width of the foundation was farther to the east or south, other than this charter authorized you, you take the responsibility. He says it would cost one hundred thousand dollars to wait and rebuid it on the former plan and former position. What the former cause was I have forgotten now; maybe it was the ice, maybe so; maybe it was something else which did destroy his foundation, and rather than wait until the water should fall sufficiently they would take the chances of building farther east—of moving the foundation or building another one fifty feet farther south, and that was done. The question of the distance between the pier and draw was also

discussed. He said, agreeable to his measurements, the law was fully complied with; that the engineer who was sent up by the river interests measured it and admitted that he was right, measureing it at a certain point in the opening, but measuring it at another point in the opening it would be less than the land requires, and that would have to be left for an arbitrament or submission to engineers to say exactly what the law contemplated in saying that the measurement should be had at an opening at an open space of so many feet.

132

Q. I will ask you, Captain, if you have ever directed your agent at Kansas City, Mr. Bohun, to call the attention of the bridge authorities to the effect that those sunken pontoons were having—that they were damaging the channel?

A. I stated it and called his attention to it and asked if there were any parties there to remove them before it would be impossible to remove them; that is my recollection.

Cross-examined by JAS. CARR, Esq., for defendant:

Q. How long have you been president of plaintiff, Captain?

A. Probably five years; I don't remember exactly.

Q. Were you president at the time of the conversation with Mr. Joey and the chief engineer of the bridge?

A. I think I was.

Q. What year was that conversation?

A. I should think it was about 1871 or 1872; I don't remember, but simply guess that; I should judge that it was about the year that the bridge was finished, the winter following the construction of the bridge; that is my recollection. I have nothing by which I could determine the period exactly without reference to memorandums.

Q. Where was it this conversation was had?

WITNESS: What conversation do you now refer to?

133

Q. The one in regard to the river interest?

WITNESS: With the committee from bridge?

Q. Yes.

A. That was held at the rooms of the chamber of commerce, in St. Louis.

Q. Was that before or after the completion of the bridge?

A. Immediately after the completion; the winter following the completion.

Q. Who represented the bridge interests?

A. Mr. Joy and Mr. Chanute, if I remember.

Q. The chief engineer?

A. Yes, sir.

Q. Who represented the river interests?

A. Henry W. Smith and myself, that I remember; there were others appointed on that committee by the president of the chamber of commerce, but I don't now remember who.

Q. You don't remember who the others were?

A. I do not.

Q. Was any record made of it—of the committee?

A. I do not recollect that committee; I don't believe there was;

I don't believe there was a record kept of the chamber's proceedings; I think the appointment of the committee—what their report was I don't know.

Q. You don't know that any was made out?

A. I don't remember how that was.

Q. Who was chairman of that committee?

A. I don't know that even; I think I was myself.

Q. Did you make any written report?

134 A. No, sir; I think not; I don't know whether any written report was made or not.

Q. Did you make any objection before the completion of the bridge in regard to the manner of building and laying it?

A. No formidable protest that I remember of; in conversations with the engineer I often objected to the manner—to the charter—or the provisions of the charter, as rendering navigation dangerous, which I thought should be avoided; but there was never a formidable protest made that I have any recollection of.

Q. Your objection, then, was to the charter, was it?

A. Yes, sir; to the charter.

Q. Authorizing the bridge to be built?

A. The effect of the charter, its provisions upon navigation; so far as any protest was concerned, I don't think any was ever made; I never made any; never was authorized to make any.

Q. You mean the effect of building the bridge under the charter instead of the charter?

A. Yes, sir; the only hope that was entertained to defeat the bridge was its illegality, if there was no other way; and I repeatedly stated the illegal features so far as they were known to me.

Q. Well, when the bridge was located, you heard of the fact that it was about to be located at that place?

A. From general information; I suppose so.

Q. You didn't request it to be located at any particular point along the river there?

135 A. No, sir.

Q. Or in any particular manner?

A. No, sir; presuming it would be built in conformity with the charter, since that had become a law and there was no evading it.

Q Well, now, in what respect was the bridge built contrary to the charter?

A. In that which I have stated in regard to the space of the draw, the bridge not standing, the draw not standing, exactly as was contemplated in the provisions of the bill, although that was a matter of opinion. I don't remember that it was built parallel with the current; not as nearly so as the law contemplates; further, that the space of the draw was less than required by the charter, and that the first pier north of the draw pier was two hundred feet instead of two hundred and fifty, as contemplated in the charter.

Q. Now, wasn't the draw placed over the main channel of the river as the channel was at the time of the location?

A. Very nearly.

Q. Wasn't it as nearly as could be?

A. I am not prepared to say that it was, because, perhaps, that channel of the river—this mouth—is in one place and in sixty day-
136 it is in entirely another place, so that at the time the piers were located or the draw pier- were located I don't know whether it was through the channel or in the best water or whether it was far below; it would have been nearer in a direct current or direction of the current if it had been further north. In my judgment, I have always contended that it was too near the Kansas City shore; it was never parallel with the current; it was a matter of opinion. They meant to set the draw right parallel as nearly as they could, and across at that place or below; that is where the bridge ought to have been, say half a mile below, for the interest of navigators. They decided to take that extreme point, making the span much less across the river than it would be down where the current was less and ran parallel with the piers.

Q. Well, isn't there a sharp point of rocks or curve in the river above the bridge—a sharp bend?

A. There is a small bend; not much of a bend, though.

Q. Coming down from Wyandotte pass the mouth of the Kaw river?

A. Not a very big bend; it was a deep bend; it has been prevented by rock and never has cut very far; as we speak of big bends, it is
137 comparatively a very small curvature; the foot of the bend comes out considerably above the bridge, so that it really don't form very much of a point.

Q. How many degrees do you say that bend is from a right angle?

A. I don't believe it is more than four or five; I never have drawn a line there. I am only speaking of my recollection of the shape of the river at that point. I think from a straight line from that point (indicating on map drawn by Mr. Chanute), commencing at the bridge, to Wyandotte it is a little more than that. I don't think I could state that. Wyandotte is still around to the north a good deal; still I suppose from Wyandotte to the pier of the bridge it would be ten degrees—that is, as I guess at it.

Q. Is that all?

A. I should think so; ten degrees would be as much as there is.

Q. How far above the bridge does the current strike this rocky shore so that it can't cut any further south?

A. Perhaps over four hundred yards; that would be twelve hundred feet; it is certainly that much and may be more.

Q. The channel of the river is changed commencing up near Wyandotte and running down to the bridge, isn't it; didn't
138 it formerly run over towards the Clay county side?

A. Yes; before the bend cut so deep it came down more upon a straight line from Wyandotte; nearer straight than after the bend was cut out.

Q. Didn't the channel flow straight strongly against the south or Kansas City shore over round that bend?

A. I think from Wyandotte it would have been ten degrees onto the Kansas City shore.

Q. And this shore is a rocky shore?

A. It was an alluvial bottom from the flat bottom of the river, but they have protected it all the way up to Wyandotte, or the mouth of the Kaw river. Wyandotte is the proper point to start from up the river; the river runs south; at the Kaw river it turns and runs east.

Q. I don't speak of any artificial embankment or riprapping, but I speak now of the natural rock. How far above the bridge till the current strikes the natural rocky formation of the Kansas City shore?

A. I guess it is a quarter of a mile; I never drew a line; a quarter of a mile where the rocks commence—the natural formation of the rocks; that, I think, is about it.

139 Q. Well, the current flows in strongly against this rocky shore, don't it?

A. Yes, sir.

Q. And follows that down some distance below the bridge, don't it?

A. It did until the bridge was built; until the pier was built it kept right down onto that shore, but when the pier was built it threw the water to the west side, and when the pontoons sunk it still more increased the current in that direction.

Q. Well now, about one hundred to one hundred and fifty yards above the first pier or south pier of the bridge, isn't there a bend in the river so as to throw the current towards the draw rest?

A. Not so near as that. I said about a quarter of a mile, I thought, from the pier to the point of rocks; I may be mistaken about that; I am not sufficiently familiar in that sort of thing; I couldn't state that I know; that is what I think.

Q. This point of rocks—the current flowing on against it from the north or northwest—don't it cause it to deflect diagonally in the opposite direction?

A. A little; yes, sir; to a considerable extent it recovers itself there again and assumes the channel which Mr. Chanute—which, no doubt, determined Mr. Chanute in his location—that is, the

140 deflection caused by striking upon the point of rocks is overcome and it assumes the straight course, agreeably to the engineer's presumption, at the place where he placed the draw.

Q. Don't it then cause the current to deflect in a diagonally opposite direction in a northeasterly direction; doesn't that form a natural current then to run down toward the draw rest of the bridge?

A. I should think it ought within a little more north of this point (indicating on map), but the current was entirely recovered at the place where they placed the draw rest (after further examination of the map as previously referred to).

Q. Now give it in your own language—the distance west of the western pier here up the river where this rocky point that you speak of juts out into the river?

A. One hundred and fifty feet, I think.

Q. Well now, how far does it jut out into the river out of a direct line, following the line of the pontoons here west; how far out of the

direct line from the line of the pontoons do you say it juts out into the river?

A. It don't jut out as far that way, possibly.

141 Q. The line of the pontoons extended westward; *now* far northward does it jut into the river?

A. It would run about as that looks (indicating on map 1); perhaps some (10) ten feet north; that is my recol-ection.

By Mr. LADD:

Q. That is the pontoon?

A. Yes, sir; if they were run right straight through; I mean to say that a line carried straight through would make it ten feet.

By Mr. CARR:

Q. It would be ten (10) feet into the river?

A. Yes, sir; that is my recollection, from the point of rocks.

Q. What is the distance from the point of rocks to the end of the pontoons?

A. One hundred and fifty feet to the western end. I don't speak positively in regard to that, because I never saw the pontoons after they were sunk.

Q. Where they were when they were originally placed?

A. Yes; you and I understand in regard to that, I believe.

Q. Well, you stated that you thought that the river flows in more or less against the south shore here (indicating)?

A. Yes, sir, the current; the channel follows the south shore down till it strikes the point of rocks.

142 Q. How far above the bridge is it to where the current of the river strikes and flows on against the south shore of the Missouri river?

A. About the mouth of the Kaw river; two miles or a mile and a half up the Kaw river.

Q. It flows, then, from the mouth of the Kaw river down to the bridge, the current does, on the south shore or bank?

A. Yes, generally.

Q. Well, for what distance does it?

A. Generally, as I said before; sometimes it goes one way and sometimes another, but that is the natural course of the channel down that bend.

Q. Was that the situation of the channel at the time of the location of the bridge?

A. I think so.

Q. How far does your knowledge extend to matters concerning the channel at this point—how far back—how many years, I mean?

A. Not a definite knowledge beyond the time the bridge was constructed; I didn't navigate there regularly—only occasionally.

Q. When did you first run up the Missouri river as high as that point?

A. About 1855.

Q. In what capacity did you navigate the river?

A. Master of boat.

Q. Now, wasn't there a large bank from five to six hundred
143 feet north of the draw rest in the river, or, say, from four to six hundred feet.

A. There was a large abutment in the river. On the north side of the river the distance would be a little more than that, because the river there is only about a hundred feet between the Kansas—

Q. I speak now of the sand bar.

A. The bar is what we call a shore bar—a gradual slope from the shore out into the river. In low water it shows and in high water it doesn't show. It is a shore bar, but is not a center bar. It is not a bar in the center of the river, as they frequently do form, as there is below Kansas City—below a half a mile; this is not one of that kind; it is the shore shelving off into the channel.

Q. Well, is this an ordinary sand bar between the north side, the Clay Co. side, and about the third pier? Well, it is north of the third pier?

A. No, sir; that is none, so near; it is not a sand bar in the sense of the word. It is a formation of the shore shelving out into the river, what is called a sand bar. What we call a sand bar is a center bar or middle bar in the river. It is nothing — or less than the shore shelvng down; it is a high shore.

144 Q. It is composed of sand?

A. Yes, sir; of sand.

Q. It scoures out, melts away, and reforms?

A. Yes, sir.

Q. According to the rise and fall of the river?

A. Yes, sir; forming according to the current of the river.

Q. The current there ever since you have known the river has been along the Kansas City side from the mouth of the Kaw river?

A. Generally of late years; in former years—I speak now not of my own knowledge, but of the appearance of the shore—the channel came down even on the north side; but it is understood that the channel has sometimes run on the other side of the river.

Q. Your memory don't extend back forty years?

A. Not to my present knowledge. It is fair to say that the channel for the last few years has followed the Kaw down the Kansas City side of the river.

Q. Now, how deep is the water at pier No. 1 of the bridge?

A. I don't know, Mr. Carr; I never measured the water there. I would simply guess at it if I was to state. There is water
145 enough generally for navigation purposes, but I never sounded it.

Q. How deep is it at the pivot pier and pier 1?

A. I don't know that.

Q. How deep is it between the pivot pier and pier No. 3?

A. I don't know that.

Q. Which is the deeper water, between the pier No. 1 and the pivot pier or the pivot pier and pier No. 3?

A. I don't know that. Boats pass on the south side of *of* the pivot pier; whether it is because the water is deeper I couldn't say; my

impression is that it is more convenient. The channel is thrown by the draw rest a little more onto the north side than on the south side, and hence the boats go on the south side. I don't know whether it is because the water is deeper or better or not.

Q. What is the distance from pier 1 down to the steamboat landing at Kansas City?

A. I should think about two hundred and fifty feet.

Q. Is the channel of the river at that point on the Kansas City side?

A. No, sir; it is about the middle of the river at the point of landing; it is filled down along the shore and it's difficult landing there in low water. The channel is out near the center.

146 Q. Don't the flow of the river from the mouth of the Kaw against this rocky point here (indicating on the map) cause it to deflect in a northeast diagonal direction across the current?

A. To a slight extent.

Q. Is that perceptible by looking at it?

A. I think so.

Q. When the river is in a good stage of water is it perceptible?

A. At a high stage of water it couldn't be, perhaps, but in a low stage it would be; I never looked at it in that view; my judgment would be, in high water it would hardly be perceptible at all, but in low water it would be perceptible, I should think. I only speak now of the flow of water striking an obstruction.

Q. Well, suppose a current strikes the shore at an angle, say of 45 degrees, how much would it be deflected in the opposite diagonal direction?

A. I couldn't tell; that is a matter of calculation entirely of current and bottom and character of the bottom and the current of the river and the stream that you are comparing or operating on; I really couldn't define how much it would be deflected.

Q. Well, if there were no obstructions, wouldn't it deflect to the same number of degrees in the opposite diagonal direction?

A. I don't understand the question now.

147 Q. The question is this: If it strikes at 45 degrees, coming down this direction (indicating), wouldn't it deflect to 45 degrees in this direction (indicating)?

A. No; I don't believe it would; the current, the tending of the —, would be such, the weight would be such that it would not rebound as much as the angle; the force of the water, the weight of the water, would remove that, would overcome that amount of deflection.

Q. Well, how much less would the deflection be in the opposite direction?

A. I couldn't tell you; I have never experimented in that; it would be only a calculation for an engineer of hydraulics to determine, and I never made that a study.

Q. I believe you have stated that you agreed to this line of pontoons as they were built along there as represented by this map, didn't you, Mr. Gould?

A. As long as they were kept in place and kept in order I thought they would answer the purpose.

Q. You wanted piles, or suggested piles?

A. That was my proposition, so they would be made more permanent; I contended that these would be more expensive, but they would be permanent and not sink; and I suggested that it would be better for them to drive piling, as it would be a permanent thing; they thought not.

148 Q. Well, the shore along there is rocky, so that the piles couldn't have been driven down to any depth?

A. At that distance out from shore they probably could have been, but I don't know; I have never sounded that bottom,

Q. Didn't they run out to the rocky shore itself at the western end?

A. They would, if they didn't keep them sparred out in a line.

Q. Isn't this a sharp shelving rock also, along here (indicating)?

A. I don't remember about the bottom there; but if the piles were driven out in a line of the pier up to the point here (indicating), I think they would be out far enough to have made always a permanent foundation.

Q. That is, if you could have sand to have driven them into, but there is no sand at that point.

A. Well, I don't know about that; on the shore there is not; but out here (indicating) on the line there is sand, of course.

Q. Don't the rocky shore shelve down?

A. No, sir; not perceptibly; it is under water if it does.

Q. It shelves down under water, you think?

A. I suppose it does; that would be the natural conclusion.

Q. Do you know the size of those pontoons?

A. They were small boats about twenty feet wide and about 60 or 70 feet long, I should think.

149 Q. How deep were they?

A. Well, about—I suppose about five feet. I should think they floated so that a boat could run on the side of them.

Q. They only sunk how far?

A. I don't think that they drew of themselves over about a foot of water.

Q. Now explain to me how the sinking of the pontoons could create a cross-current?

A. It could form a dam by which the water could deflect.

Q. How would you locate the pontoons?

A. I suppose they sunk into position in which they were placed.

Q. Would that create any cross-current?

A. Yes, sir; by the sand filling in and around them instead of the water passing out under them where they sank—right at the place they were located—and, of course, there was no water passing under them, nor could there be any inside of them, which would really form a bar at once. I think you can comprehend that.

Q. Well, do you know that this is — cause?

A. I do.

Q. How do you know?

A. From my observation and general knowledge of such an obstruction—I knew from looking.

Q. State whereabouts those pontoons sunk.

A. Nearly where they laid. I didn't see them sink. I only see the break in the water that falls over them, and I judge they are very nearly where they were formerly located; there is a break
150 in the water; that is how the water falls over.

Q. Did you ever make any soundings to discover whether there was any sand?

A. No, sir.

Q. You never did. You don't know, then, that there is any sand found there?

A. No, sir.

Q. Do you know when those pontoons sunk?

A. No; I only know from general report. I don't know of my own knowledge; didn't see them sink.

Q. Well, have you examined the place?

A. Yes, sir.

Q. When did you examine it?

A. Several times since they sunk.

Q. When was the first examination?

A. I think early in the spring of the year they sunk. I think two (2) years ago I examined them, or in the spring after they had sunk; they sunk in the winter, if I recollect; I don't remember, however.

Q. Do you remember when the "Alice" struck the draw rest?

A. Yes; I think it was in the spring after the pontoons sunk.

Q. Well, what spring was that?

A. I think that was two years ago this spring; that would be 1875. I examined — immediately after she sunk. I was there to look after the cause of the sinking.

151 Q. Well, were the officers of the boat belonging to the plaintiff under your direction and control as president of the company?

A. No, sir.

Q. Under whose direction and control were they at the time?

A. Well, they were under mine, so far as the president of the company has charge of the minutia and detail of men that are employed by the company—of the *of the* president as the representative.

Q. Who employs or sanctions the employment — that are employed?

A. The captain generally hires his own crew, so that indirectly the president of the company may be said to be the general director.

Q. Now, do you remember when the "St. Luke" struck the draw rest?

A. Not positively; my impression is it was a few months later.

Q. Did you speak to the captain or master and pilots of the "St. Luke" in regard to those pontoons being sunk there?

A. I don't know, sir; I presume so; I don't remember any conversation that we had directly on that point, although it was a general remark that those pontoons had sunk and it was filling up that side of the draw—that channel—and it would necessarily form an

obstruction which we would have to avoid by all the possible
152 means we could.

Q. Did you give them any instructions in regard to passing through that draw?

A. No; never did, to my recollection.

Q. Which is the safer way to pass through the draw coming down, head on or stern foremost?

A. Well, it has been always considered by those engaged in navigation that the safe way, when there was anything to land against, was to land and drop down along, but at present, there being nothing there to land against, it is considered safe to run at it head foremost; the better way is to run at it, to run through, with head on; that is the safer way—is the only safe way through such a draw as that; that it is not always safe is evident.

Q. Suppose the wind was blowing strongly from the northeast?

A. That would have the tendency to throw her over on the pier.

Q. Was there anything to prevent the "Alice" and the "St. Luke" from passing down through the north side of the draw at the time that they respectively struck the draw rest?

A. I don't know that I ever heard of a boat doing that.

Q. When this—well, if these pontoons created a cross-cur-
153 rent when the "Alice" struck the draw rest wasn't this cross-current there in the fall when the "St. Luke" struck the draw rest?

A. I suppose so.

Q. When the "Alice" struck in the spring and the "St. Luke" in the fall, now wasn't the same cross-current there?

A. I expect so; I presume so.

Q. Why, then, didn't the pilot run through the north side?

A. I don't think it is practicable. I never knew a boat to do that. I don't think they have ever crossed on the north side. The reason I think so is from the fact that I never have known of any boat going down that side.

Q. That is your only reason?

A. Never having tried it or known of anybody else having tried it, my impression is that I never heard of its being done on account of the draw rest standing out, making it more difficult to get around it than it is to keep down the shore. I don't know why; I suppose that is the reason; a pilot might give a different version of it.

Q. Your theory, then, is that the sinking of the pontoons caused a sand bar on the south side of the draw?

A. To some extent the sand deposited around them.

154 Q. And so created a cross-current?

A. Well, it deflected the water over towards the draw rest.

Q. Now, wouldn't this be plainly visible to the pilot if he was looking at the water?

A. Not very. It was all comparatively slack water down there, and unless it was a high and strong current an obstruction of that kind might lay within three feet of the surface of the water, and not make any visible effect in slack water like it is on the shore. It

would make no break if they were under the water only a short distance; some three feet wouldn't make any break at all.

Q. Then the current would be too deep to affect the boat?

A. Oh, no; it would still have the effect on the hull of the boat, which extends down five or six feet. Where boats draw that much water on the Missouri river, when they are unloaded they draw about three feet, and when they are loaded they draw six or seven feet.

Q. What was the width of the "Alice?"

A. Thirty-three feet; with *with* the wheels making it fifty-six.

Q. And how long?

A. 215 feet long and 56 feet wide.

Q. And how was the "St. Luke?"

155 A. The St. Luke was very much different—a little wider.

Q. Captain, wouldn't the water—suppose the water was twenty (20) feet deep opposite the draw rest and the pontoons were five (5) feet deep and sunk—wouldn't the water flow straight over them?

A. No, sir; the direction of the water is given from the bottom and not from the surface.

Q. Why wouldn't it, when it struck the pontoons, flow straight over?

A. It would; but it would show a break and the bottom of the current; the obstructions of the bottom would form an eddy water, and it would be an eddy water instead of a current; that is the law of the river, so in any river where there resides a current and — is obstructed it forms an eddy; the current is destroyed, but the eddy remains; in this eddying motion it runs up & down and round.

Q. Wouldn't it run over, too?

A. Virtually, of course, it does all the time, down to a small extent.

Q. If the obstruction was deeper than the water the water would run round it, wouldn't it?

A. It would run over it as far as it could.

Q. If the obstruction is deeper than the water — would go round?

A. If it couldn't go over; yes, sir.

156 Q. Suppose it covered it fifteen feet deep, wouldn't it run straight over and make no difference?

A. Yes, sir; it would make a difference.

Q. It would have an effect on the surface.

A. Yes, it would effect it very soon; it would effect a deposit in only a few weeks or days; for that reason would fill up with sediment before it would form an obstruction clear to the top; at first it would burst over it, but in a little while it would fill up to the top.

Q. But you don't know that the sand formed in this draw, do you?

A. No, sir.

Q. Who was the pilot on the "St. Luke" at the time of the accident?

A. I don't remember.

Q. I will ask you if Bob Bailey wasn't pilot on the "St. Luke" at the time of the accident?

A. I think he was, since you mention it.

Q. Where is he now?

A. He is living up in Missouri, about Lexington, at farming, as I understand.

Q. Did he act as pilot any more for plaintiff after the accident of the "St. Luke"?

A. Yes, sir; I think he has been in the employ of the company since.

157 Q. You think. Do you know that he has?

A. Well, that is my recollection; to the best of my knowledge and belief, I say he has.

Q. What boat did he act as pilot on?

A. I don't remember that.

Q. How long did he continue to act?

A. I don't know.

Q. Don't you know, Captain, that he quit after that accident or was discharged or dismissed, and never again acted for plaintiff?

A. Yes; he did act afterwards, but I think he quit then or was discharged, I think. I don't know. The captain of the boats have the management of the under officers, and I know very little of what is done from trip to trip. The officers quit for various reasons, and I don't pretend to keep track of them, but I am quite confident that he has been in the employ of the company since then, but I believe he quit at that time.

Q. What became of the "St. Luke?"

A. She was lost at the St. Charles bridge.

Q. Who was acting as pilot then?

A. A man by the name of Townsend.

Q. What year was that she was lost at the St. Charles bridge?

A. I think it was, perhaps, the same year.

Q. You are not able to give the name of the crew of either boats?

A. No; only the captains.

158 Q. Well, was Bailey in the habit of taking sprees?

Mr. LADD: I object to that question.

WITNESS: He has so been at periods all his life, I think.

Mr. CARR: Wasn't he a man, when suddenly confronted with danger, — would — his self-possession?

A. I don't know that; I never had a word with him as pilot, *it* think, in my life; we always esteemed him as one of our best pilots. He never drank liquor when he was on duty; he would go off on land and get on sprees; he did that all his life, I believe, since I have known him—thirty — forty years.

Mr. CARR to Mr. LADD: Do you expect to read Capt. Gould's deposition in the "Joe Kinney" case?

Mr. LADD: Yes, sir.

Mr. CARR to WITNESS: Q. You are a steamboat man, Captain;

have viewed the building of bridges across the Missouri river and Mississippi river with a great deal of jealousy, haven't you?

A. I have viewed it with a great deal of interest, because I think the interest of navigation is more or less involved.

Q. Would this current, formed by the point of rocks, create
159 a cross-current so as to throw a boat against the draw rest of the bridge?

A. No, sir.

Q. Wouldn't the effect of that current be to throw a boat coming down the river against the draw rest?

A. No, sir; it is too far up the river—too great a distance; the deflection would have recovered its natural course in less distance than a quarter of a mile, as I said, from the point down to the draw, and what effect the current would have produced above would have been recovered by counter-current and would have come to an equilibrium again, as the engineer has shown in his location.

Q. If there is a cross-current in the east draw couldn't a pilot discover it in passing up through the draw?

A. Not in the Missouri river or a river in as murky and boiling and disturbed condition as that is in all the time; all this sort of thing produce- a motion on the water, so that a pilot couldn't tell whether the water was deflecting more than usual or whether the direction of the boat had changed the water.

Q. Why couldn't he tell it as well going up as coming down?

A. The current would have no effect going up, and coming
160 down the current would have more effect.

Q. With a full head of steam on coming down, why can't he govern the boat just as well in descending as in ascending?

A. Well, for various reasons. In ascending, if he saw he was in danger he would stop his boat, and the momentum given to the boat by the stream gives a little stearageway if he stops his engine, and she generally moves down the stream, and the moment she strikes or fills shoal water or an obstruction she darts off. In going up the speed is very slow, and if there was a current she would only drift along gently against the pier or against the draw or against the draw rest.

Q. Do boats sometimes take what they call a sheer against the pilot?

A. Yes, sir; they strike shoal water, or obstructions, as the phrase is; she runs off from shoal into deeper water; she will do it from that cause and sometimes from an eddy on the bottom.

Q. Well, this would happen to your best pilots—that is, a boat taking a sheer on them?

A. Yes, sir.

Q. Is it in deep or shallow water that a boat is more likely to sheer?

A. From shallow to deep water.

161 Q. Could a pilot prevent a boat from running away from him?

A. He can, if he has steam, but he is running between two straights. He has got to dodge about it in passing a pier. Very

little carries a boat up to the obstruction either one side or the other.

Q. How do you know that the current in the south draw is filled up?

A. Only from my observations and general reports.

Q. Can boats pass through it?

A. I think so.

Q. Is the cross-current still there?

A. I suppose so. I haven't been there recently. I suppose so.

Q. Were those pontoons in full view as they were built after the completion of the bridge?

A. They were until they sank.

Q. Were they ever used in ascending or descending the draw?

A. I think so.

Q. Was it safe for a pilot to pass through after he saw they were sunk?

A. Until he knew the effect, it might be considered so. I don't know. They have passed through safely, and the conclusion was they were safe, it being the only way to get through.

Q. You don't know of any boat striking the draw rest or
162 the pier of the bridge, except the boats of plaintiff?

A. No.

Q. Are there other boats that pass up and down through the draw?

A. Yes; a few stern-wheelers.

Q. These were side-wheelers of the plaintiff?

A. Yes, sir.

Q. Ain't they more manageable than the stern-wheelers?

A. They were more liable to injury because the wheels are on the sides.

Q. Don't that give them an advantage in handling a boat?

A. It is supposed to be — case. Some claim that the stern-wheelers manage best.

Q. Isn't it more under the control of the pilot—the side-wheel boat than the stern-wheel?

A. I should think so if it was no wider, but the side-wheel boat has a projection of the wheels and has more than double the width of a stern-wheel boat.

Q. Your opinion is that the side-wheel is more manage-ble than a stern-wheel boat?

A. I don't state that as an opinion, that the side-wheel is more manage-ble, because, as I stated, there are various opinions; at some places the side-wheel boat is the safer and at others the stern-
163 wheel. Passing through the bridge piers the stern-wheel is far more safe than the side-wheel; in other places I would say the side-wheel boat was more safe.

Q. How would it be in passing through the draw at Kansas City?

A. It is said — preferable to the stern-wheeler.

Q. To the side-wheel-?

A. The stern wheel is decidedly preferable to the side wheel; the

width is much less, the velocity is quite as great, the steerage-way is more; there is more power.

Q. What is the width of these side-wheel boats?

A. An average of sixty-feet wheels, and all the stern wheel is about thirty feet; thirty-two feet is, perhaps, an average.

Redirect examination by Mr. LADD:

Q. You think it is about a quarter of a mile above the bridge where the natural rock shore begins?

A. That is my recollection, as I have stated.

Q. And when Mr. Carr asks you about a point of rocks you understand him to mean where the rocky shore begins?

Mr. CARR: I object to that question on the score that it is leading.

Mr. LADD: When Mr. Carr asks you about a point of rocks, do you understand that he refers to the place where the natural rocky shore begins?

164 A. Yes, sir.

Q. How far is that? How is that place in relation to where the bend in the river ceases?

A. It seems to terminate at that point of rocks, then assumes a pretty straight line till you get below the Kansas City line.

Q. Now, what do you mean by the point of rocks? Just locate it again.

A. It is the foot of the bend; it is somewhere between three and four hundred yards, and a quarter of a mile from the pier up to the point of rocks; that is my recollection; I haven't measured it.

Q. The point of rocks, then, is the foot of the foot of the bend?

A. Yes, sir.

Q. It is a sharp, projecting point standing out into the river?

A. No, sir; it is like a prominent place. In looking from the bridge up it would show a point there, but the curve commences at that point and gradually falls over the south.

Q. While these pontoons were in position and floating on the water, did any of your boats ever collide with the bridge?

A. Never.

Q. Or the draw rest?

A. Never.

165 Q. You stated in your cross-examination that there was, to a certain extent, a deflection from the point of rocks—from the place where the rocky shore commences above the bridge?

A. Yes.

Q. Now, when the channel, when the current, goes down between the draw rest and the pontoons, how is the current—I mean while the pontoons were stationed there?

A. It was then pretty nearly a straight current; it had recovered itself, and it ran pretty nearly straight through and went against the draw rest and between the two (2) draws.

Q. But when it got down south it ran between the piers of the bridge?

A. Yes, sir; just about where the engineer thought it would run when he located his piers.

Q. Captain, suppose these pontoons, instead of sinking right on a line where they lay, had sink transversely to the current, how would that have effected the current?

A. In order to have done that, if they had sunk in that way, they would, of course, naturally have been thrown out into the channel further; the effect would be the same, only to a greater extent. They would have swung around and come out into the c-annel further. It wouldn't have changed the depth or the amount of the deposit simply by carrying it out further.

166 Q. Does the rock at the place where the rocky shore commences form a point or a curve, actually?

A. I think that would be only a difference of terms, wouldn't it?

Q. Well, is there a sharp point or not?

A. No; it is not a sharp point by any means. When you are looking from the bridge it looks like a point, but when you look from up the river it looks less so; its direction is like this (indicating). When you cease making a curve there is a little bend and you assume a straight line from the foot of the curve. It is not sharp, I mean.

Recross-examination by JAMES CARR, Esq.:

Q. The pontoons being fastened at the western end, could they sink transversely to the channel?

A. They could very easily. The lines might part. They were only temporarily fastened. They would sink or part the lines and swing around.

Q. Transversely to the channel—that is, across the channel?

A. Yes.

Q. Square across it?

A. They might sink in position, partially, or square across, or compose a right angle.

Q. If they were fastened at the upper end?

A. The current would straighten them out.

Q. They were fastened together, were they not?

A. Sometimes they were and sometimes they were not. They allowed them to be in a dilapidated condition. I don't know

167 how they were fastened or whether they — fastened together at the time they sunk.

Q. Suppose they were fastened together, wouldn't the current keep them straight with the channel?

A. It would have a tendency to throw the line around if the line parted.

Q. Well, they couldn't float out so as to be right across the channel?

A. Not unless the line parted.

Q. Suppose they became detached or loose or separated, wouldn't the current float them down?

A. It would depend upon circumstances; if they filled—it is like sinking a vessel of any description—it will sink whenever it has

been accumulated weight enough to sink it. There might have been half full of sand and might have been sinking a good while. They might still have continued together. They would sink whenever there was weight inside to carry them down.

Q. You don't know whether they remained connected together or whether they became separated from each other?

A. No, sir; I never examined them since they sunk.

Q. You don't know that they are there of your own knowledge?

168 A. No, sir; only from what I see. I don't know that it is a pontoon.

O'Flaherty.

EDMAND O'FLAHERTY, being produced and sworn on the part of the plaintiff, testified as follows:

Q. Where do you live?

A. Kansas City.

Q. How long have you lived there?

A. For twenty-two or twenty-three years.

Q. What is your business?

A. Surveyor; have been for 13 years.

Q. I'll get you to state whether if at any time you made any measurements of the Kansas City bridge, of the distances between the piers?

A. I did sir. (Map shown witness.)

Q. State how the bridge is laid upon the piers—whether it is laid; explain that.

A. It makes an angle of about seventy-two degrees with the axis of the river of the stream as represented on the plat.

Q. Explain what you mean.

A. That is the position of the piers (shows). It makes a right angle of seventy-two degrees.

Q. Now, how is the position as to the pivot pier with reference to the first, which is higher up the stream?

A. The one that is farther west is highest up.

Q. Then, the piers on the south side are higher up than the piers on the north side?

A. Yes, sir.

169 Q. Which side of the bridge is higher up?

A. The south one.

Q. Does the bridge lie at an acute angle across these piers?

A. Pier No. 1 is further up than the next number one, on the south side of the bridge; is farther up than the pivot pier. I find that the distance between the pivot pier and the next pier is 161 ft. 5 in.—that is, measuring on the axis of the bridge—that is, a line run along the center of the bridge, it is exactly 161 feet ½ in. From pivot pier to pier No. 2 it is the same distance—that is, the stage of water August 16th, 1875, one hundred and sixty-one feet half inch; at the water surface between the crossing it would be less; I did not measure that.

Q. What is the diameter of the pivot pier?

A. It would be 27 or 28 feet; I did not measure it.

Q. What is the direction of the draw rest with reference to the faces of the piers?

A. Parallel as nearly as could be; exactly parallel, I think.

Q. What is the distance from pier No. 1, in a straight line, to the draw rest?

A. It is 153 feet .16 inches.

170 Q. Taking the draw rest to be part of and attached to the pier, what distance is there in the clear between the pivot No. 1?

A. 153 feet .16 in. There is that much open water between the piers; that is the perpendicular distance. WIT.: The diameter of the pivot pier is 29 feet; I find it marked here.

Q. How long have you been at any time familiar with the course of the river above and below the bridge?

A. I made surveys in September, 1855; I made a survey right at that place.

Q. I'll get you to describe the general course of the river from Wyandotte down past the city (map of Kansas City shown witness).

A. It is as represented on that map.

Q. How long have you been familiar with the course of the river past Kansas City?

A. Since 1857.

(Witness shows on the map the course of the river.)

Q. How has the water been right up to the edge?

A. There is a deposit of about fifty feet.

Q. I mean at the time of this accident?

A. The channel was right on the outside of the pontoons. The pontoons were put there, I suppose, for the purpose of pro-

171 tecting the channel. The pontoons were floating on the water.

Q. Do you — anything of any deposit between pier No. 1 and the shore?

A. That has been there for the last three or four years; since the pontoons disappeared. I did not see anything of it while the pontoons were there. If there was any it must have been under the pontoons.

Q. How is it now between pier No. 1 and the shore?

A. There is very little water; it is nearly all deposit.

Q. How far out does the still water and deposit extend?

A. The still water goes up above Broadway five or six hundred feet.

Q. Do you know how long that still water has been there?

A. It has been dead water since the pontoons disappeared.

Q. About then you saw it?

A. I did not pay much attention to it; I know there was no deposit there before; I know the channel was closer to the foot of

rock at that time than at the present time; that was before the commencement of the bridge.

Q. I'll get you to explain to the jury what work has been done on that bank.

A. Chanute had riprapped it from about the mouth of the
172 Kaw right along to within twelve or thirteen hundred feet of the bridge.

Q. What other work?

A. The city did some work several years ago, right above Lykins' warehouse, two or three hundred feet and made the passage-way 40 or 50 feet wider. I was engineer at the time; we filled it in some.

Q. Do you know of any other work?

A. The Pacific railroad folks put in a large amount of rock when they were excavating on a portion of their lands. The best part of the whole riprapping has been done by the Pacific Railroad Company. That is below Chanute's.

Q. Before that work was done what was the river doing there?

A. It was eating in the bank; it had eaten in some fifty feet farther than it is to-day; it was right in within four or five feet of the rock in 1859. That was the year that I made that fill that I spoke of. The Pacific Railroad Company did its work a year or so after that. This work was done in 1866. It was after their road was running up there.

Q. How long is that rock deposit that was made by the Pacific R. R. Co.?

A. About two hundred and fifteen or twenty feet—seventy-five yards, about.

173 Q. About where was the old Lykins warehouse?

A. About 40 yards further down the river than the end of that material that was deposited there—11 or 1,200 yards above the bridge.

Q. Since the riprapping along the bank what change has there been in the bank of the river from away up to the mouth of the Kaw down to the bridge?

A. The channel runs right along pretty near parallel with the riprapping.

Q. What I am asking is whether it remains the same.

A. I think it pretty nearly the same all the way up there. It depends on the stage of the water. The bank remains the same. I don't think there has been any washing at all—may be, a little rock falling down. At the surface of the water I don't think it has changed any.

Q. How is the work of the Pacific road as to permanency?

A. It is the best of all.

Q. I'll get you to state what that is. (Map No. 1 shown witness.)

A. This is a map of the western part of the city of Kansas. This line (indicating) represents the foot of the embankment.

Q. Where is the bridge on that?

A. The bridge is right there (shows). I made that map for several purposes. I made the map for the water-works. I made it when I was making the map of the city.

174 Q. Now, I'll get you to state whether this is a correct representation of the bank of the river.

A. It is as correct as a survey could make it. This map was made in about 1875; commenced it while they were building the waterworks.

Q. Where is the bend of the river?

A. At the foot of Fifth street. This map shows the riprapping at 4 or 5 feet above the stage of water the day I made it. (Map No. 2 shown witness.) This is a map of a portion of the city west of the bluff, and was made in Chanute's office. The map was drawn by a draughtsman in his office.

Q. What map is this? (Map No. 3 shown witness.)

A. That is a perfect copy from the other map.

Q. Is that a correct representation of the city?

A. It is.

Q. This, you say, is the sand bar? (Points on map.)

A. Yes, sir.

Cross-examination:

Q. Who employed you to do these measurements?

A. Gage and Ladd.

Q. Who paid you for it?

A. They paid me for it.

Q. How much?

A. I forget how much. I think I charged them thirty dollars.

Q. This map drawn by you and Case—it represents the distance between pier No. 1 and the pivot pier?

175 A. Yes, sir; I make it 161 feet 5 inches at that stage of water.

Q. Did you know the stage of water?

A. That shows; it is the correct position at that stage of water.

Q. How much was the water above low water on August 16th, 1875?

A. It was considerable; I could not tell exactly; it would be about six feet above low water.

Q. This 161 feet 5 inches is in the clear between pier No. 1 and the pivot pier, measuring right along on the centre of the bridge as the bridge is laid on the piers?

A. That is the distance if the bridge is laid on the piers.

Q. Are you familiar with the current there?

A. I could not say at the time these piers were located and built?

Q. Were the- not located parallel with the current?

A. I think that was the intention, to locate them parallel with the current for all stages of water.

Q. Could you have located them more parallel with the river?

A. It would be impossible to make it exactly parallel with the river for all stages of water, unless you could change it; the river is so irregular that the course of the channel would not be the same at high and low water. In my judgment, they are lo-

176 cated very near parallel with the current. I think at the time I made these measurements they were as near parallel as they could be.

Q. The river comes down and makes a semicircle from Wyandotte?

A. No, sir; no semicircle. (Chanute's map, as shown in printed manner published by Chanute, shown witness.) I could not say anything about that map of Chanute's; it is on too small a scale.

Q. What is the distance between Wyandotte and the bridge, measuring by the river?

A. I don't remember; it would be pretty near two miles; I could not say that Chanute's map is correct; it does not seem that the bend is as great as it shows on that map.

(City map shown witness.)

Q. Who drew this map?

A. I forget who the draughtsman was; this map represents the shape of the river pretty well.

Q. Pier No. 1 don't stand out in the river as far as that represents, does it?

A. I don't know, sir.

Q. What is the distance from the edge of the water to pier No. 1?

A. I don't know.

Q. Is this a pretty fair representation of the Kansas City shore along there?

A. I think it is.

Q. How far from the bridge does the rocky shore extend up the river?

177 A. There is rock all the way up about fifteen hundred feet, but the river don't run on the rock all the way there.

Q. This rocky shore deflects the water out in the river?

A. There is dead water running along the shore for about fifty or sixty feet.

Q. How far above the bridge?

A. It might go all the way up to the Great Bend.

Q. What do you call the great bend?

A. This is what I call the greatest bend (shows on map); the first great bend is about fifteen hundred feet above the bridge. That is the first great elbow. When you get to the foot of Broadway it deflects a little to the right.

Q. I'll ask you if about 250 yards above pier No. 1, if the bend don't cease and run in a northeasterly direction and then go east?

A. It is nearly straight till you get to the foot of Broadway; there it deflects a little. It do- not run east at any place; my map shows it just as it is.

Q. The water coming around this bend and striking this rocky shore, don't it deflect it towards the draw rest?

A. No, sir; not there. The bank is a little irregular, but I don't think it has any effect on the current.

Q. Commencing fifteen hundred feet and running down within five or six hundred feet, ain't the direction of the river there in a northeast direction?

178 A. It is northeast direction all the way.

Q. Commencing at the intersection of 5th street, and within

five or six hundred feet of the bridge, don't this rocky formation deflect it out some?

A. It would have to go in some distance and cut into the rock.

Q. Up to twelve hundred feet above the bridge you strike the rocky formation?

A. I don't strike it anywhere between there and the bridge. There is a fill of at least thirty or forty feet made by the city and by others. I think the rock is extended about three hundred feet up. You can't see any rock from the foot of Broadway. The water does not run up by the rock.

Q. Do you say there is not a rock formation from the bridge up fifteen hundred or two thousand feet?

A. There is a rocky formation all the way up there to the foot of the bluff. There is a rocky formation fifteen hundred from the bridge up.

Q. Does not this rocky formation for six hundred feet up deflect the water out?

A. It hasn't a particle of effect on it. I think it is the embankment that effect- the current. I think the current runs right along straight down; the current side of the dead water is nearly parallel with the bank.

Q. Commencing here at six hundred or twelve hundred
179 feet above the bridge, whereabouts does the current strike, coming around that curve?

A. It strikes the bridge as near that as it can (shows on map).

Q. Mr. Chanute says, in his deposition, that the pivot pier is further down the river than pier No. 1 and the bridge runs over it at an angle of eighteen degrees.

A. I say it is at an angle of seventy-two degrees with the axis of the bridge. I think he made a very great mistake; it ought to be seventy-two degree.

Q. Instead of the axis of the bridge running at right angles it runs at an angle of eighteen degrees?

A. It is eighteen degrees out of a right angle.

Redirect examination:

Q. Where is the rock with reference to the foot of Fifth street?

A. You can't see any rock from the edge of the bank; the rock is thirty or forty feet.

C. B. Waddell & J. B. White.

The plaintiff next read in evidence the deposition of CARR B. WADDELL, which is in words and figures as follows:

By Mr. LADD:

Q. What is your name in full?

A. Carr B. Waddell.

Q. Where do you live, Mr. Waddell?

A. I live here at present.

180 Q. What is your age?

A. My age is 33 in April.

Q. What is your business?
A. Policeman.
Q. How long have you been on the police force now?
A. Since last May—the 20th day of May.
Q. What was your business before that?
A. Steamboat pilot on the Missouri river.
Q. For how long a time?
A. Since 1863.
Q. Are you acquainted with the Kansas City bridge?
A. I am.
Q. How often did you pass through it—how many times?
A. Oh, I don't know.
Q. A great many times?
A. Yes, sir.
Q. Taken boats through?
A. Yes, sir.
Q. Were you on the St. Luke in September, 1874, when she struck the draw rest of the Kansas city bridge?
A. I was.
Q. Where were you?
A. I was in the pilot-house.
Q. Who was at the wheel?
A. Robert Bailey.
Q. He was pilot, was he?
A. He was.
Q. Who was directing the motion of the boat?
A. Captain Robert Keith; it was the custom for the pilots to be in the pilot-house.
Q. You stood where you could see the movements of the boat?
A. I was immediately in the rear of him—off to his right.
181 Q. How were you connected with the boat; were you pilot of the boat?
A. Yes, sir; I was piloting.
Q. Now, what time of the day or night was that?
A. Well, sir, it was about—a little bit before dusk; about that time in the evening; it wasn't quite dark.
Q. You may describe the course of that boat, as near as you can, from the time—say for a quarter of a mile above the bridge.
A. Well, I was coming down through the bridge; attempted to go through as usual, when the boat began to flank—that is, the current drifting the stern around, and was hence coming quartering into slacker water. We endeavored to pull the flank out of her, but the force of the current that comes across here (indicating on map) from this point from these sunken pontoons didn't give time enough before she was carried against the upper draw rest. He endeavored to pull the flank out of her by pulling the larboard wheel.
Q. Now, tell us the cause of that current—that cross-current you speak of.
A. Well, sir, I took the cause of that to be—it is a great deal where those sunken pontoons were.
Q. Did you ever go through there before the pontoons sunk?

A. Yes, sir; frequently.

Q. Did you ever have any trouble—any collision with the pontoons?

182 A. I have used the pontoons in going through, but I never had any trouble with the stone-work or the breakwater—that is the upper rest. I have come up.

Q. By trouble, I mean did you ever have any collision?

A. No; no, sir.

Q. Now, what course did you persue when the pontoons where there floating; how would you take your boat?

A. I generally run a- close to the pontoons as I could; when we could see what we were doing we would slide down along by the side of the pontoons, and there was such a force of current across there (indicating on map) prior to the sinking of the pontoons as to carry us right through along here (indicating).

Q. Was there any change in the current after the pontoons had sunk?

A. Yes, sir; there was.

Q. Well, what was that change?

A. It threw the current out more to the north; still more square across the entrance going down.

Q. Well, is that the current that you attribute the accident of the "St. Luke" to?

A. Well, yes; it is the cause of it; that broadside current, I should say.

Q. Just tell how the current struck the boat, and what part of the boat did it strike.

183 A. Well, it struck her from about a little after midships; about midships, round of the stern, and the stern was swung around and thrown over against the draw. (The witness points out on the map before referred to the relative position of the boat during the accident.)

Q. This current you say struck her before midships?

A. About midships, as we came down through the current above this point (indicating), the current is not so strong. It is just below here; just at the head of those sunken pontoons, a little in this direction, an eddy was formed. I have known that eddy to extend plumb to the bridge along the shore, with slack water; when a boat strikes slack water it darts from the slack into deep water.

Q. How is the water down below the pontoons, say, between pier No. 1 and the shore—between the south pier and the abutment—how is the water along the shore there, below the pontoons?

A. Let me see, the bridge runs north and south; that pier is next the Kansas City shore. The abutment water is stronger than it is nearer the Kansas City side.

Q. I mean by the abutment the stone-work?

184 A. There is no strong current on the stone-work. The current shoots out in this direction (indicating). I have seen the time when I could run that bridge tolerably nice—right straight; now they have got to come down just as close as they can. I worked on the river until last May, and then quit.

Q. Who was the captain of the boat at that time?

A. George G. Keith.

Q. Before the pontoons sunk how was the current right between the draw (indicating relative position on diagram attached to Mr. Chanute's deposition)?

A. There was always a little draw off, but it come pretty straight down here (indicating). It was apt to regain the force of the water—the natural course of the water—in coming down through the bridge pretty straight, but after the sinking of the—these flat boats—you call them pontoons, I believe—I frequently had to take the lead lines. There would be shoal water going into the landing at Kansas City by being carried away there (indicating), and I have known this slack current to be way up there, near up the head of the pontoons. I have actually had to back away from this lower
185 draw rest to keep her bow from going into there.

Q. Well, that was before or after the sinking of the pontoons?

A. That was before the sinking. There was always a current there before the sinking of the pontoons; now the current comes right across, and this cross-current runs from the head of these pontoons and runs across to the upper draw rest.

Q. Well, was this current which runs from the head of the pontoons to the upper draw rest there before the pontoons sunk?

A. No, sir: no, sir.

Q. Is that a pretty strong current?

A. Yes, sir; it is.

Q. Mr. Waddell, I will get you to state which side of the draw boats are in the habit of going through, the north side or the south side?

A. The south side.

Q. How many boats did you ever take through the north channel?

A. I never took any.

Q. How many do you know of having gone through there?

A. I never heard of any going through that channel.

Q. State, if you know, the reason why pilots took their boats through the south channel instead of the north channel?

186 A. About a quarter of a mile above the bridge here there is the point of the bar extending down from the north Missouri shore, which throws the current out this way, and if a boat got in here and run across this current and come away over here in shoal water and straightened down, and even if she comes this far and she runs off from — on account of shoal water, why she would go across and drift through the south this way.

Q. What effect has the upper draw rest on the location of the current—of the feasibility of running boats down thro' the north draw?

A. That would throw a boat square right across the head of this draw rest, and I would consider it a very dangerous undertaking; it would be a dangerous undertaking—the shoal water up above the heads of the upper draw rest, and then this current, you know,

would have a tendency to throw the boat down on the upper draw rest; then it would have to come down this south channel.

Q. Before these pontoons sunk was there any such current running from the head of where the pontoons were across to the draw rest as it was when the "St. Luke" run across there?

187 A. No, sir; those pontoons were very beneficial for steamboats going through that bridge.

Q. What effect had the sinking of the pontoons on the condition of the water?

A. Close up to the Kansas City shore, under the bridge and below the bridge, it has a tendency to fill up that shore; it makes the water slack; it forms a bar below—that is, below the pontoons.

Cross-examination by JAMES CARR, Esq., attorney for defend.:

Int. What river did you run on as pilot?

A. The Missouri.

Q. All the time?

A. Yes, sir.

Q. Did you never run — any other at all?

A. Well, I have run on other rivers, but not then in the capacity of pilot.

Q. Well, you knew the river at Kansas City before the bridge was built, did you not?

A. I did.

Q. When was the first time you ever run up there?

A. Oh, well, in 1863.

Q. How far did you run up?

A. To Omaha.

Q. On what boat?

A. On old Prairie Rose.

Q. Were you acting as pilot then?

A. I was not; no, sir; I was acting as pilot No. 2; I was learning the river.

188 Q. Who was the pilot?

A. Thomas Anderson.

Q. Where is he?

A. He is in Callaway county, near Martinsburg.

Q. When did you take charge of the boat as pilot yourself?

A. Well, I think my licence was issued about ten (10) years ago; I served about three years apprenticeship.

Q. That would be about 1866 that you took charge of a boat as pilot?

A. Yes, sir; I served until 1876.

Q. How long had you been pilot on the St. Luke prior to this accident?

A. Well, I had forgot; I had been on her from the opening of navigation of that year.

Q. How long did you continue on the St. Luke?

A. Up to the time that she sunk.

Q. When was that?

A. On the St. Charles bridge, the day and date I have forgot, a couple of years ago, I believe.

Q. What time of the year was it that she struck the draw rest at Kansas City?

A. I couldn't say exactly; it was in the spring of the year, I believe.

Q. Spring of 1874?

A. I suppose so; I never made any note of it; therefore I cannot swear positively.

189 Q. How many months afterwards that she sunk at the St. Charles bridge?

A. Well, I don't know that she struck the two bridges the same year; I couldn't say whether she struck the two bridges in the same year or not.

Q. Or the next year?

A. No, sir.

Q. Who was the pilot at the time she struck the St. Charles bridge?

A. Tom Townsend.

Q. She sunk there?

A. She did.

Q. Were you on her at the time?

A. I was.

Q. But not on watch?

A. No, sir; I was asleep.

Q. Well, do you call them the head pilot or chief pilot and assistant pilot?

A. Well, no; a man's license is issued to him as pilot just as good as another just the same class.

Q. Bob Bailey was the other pilot?

A. Yes, sir.

Q. And he and you ranked the same?

A. Yes, sir; on the St. Luke; we paid the same for our license.

Q. When did you commence acting as pilot on the "St. Luke?"

A. I started out that spring with him on the "St. Luke;" I was never with him before.

190 Q. Was he in the habit of taking sprees?

A. I never saw him on sprees; I never had much acquaintance with him; I can't say that I ever saw him drunk in my life; I only heard it; I never saw him on a spree.

Q. Well, how was he at the time of this accident; had he been drinking any?

A. I can't say; I don't know much about him—about his disposition.

Q. Could you tell from his looks if he had been on a spree?

A. Well, I believe I can say that he had not been drinking and wasn't on a spree at the time; he and I had some little talk up at Wyandotte; he didn't speak to me like a drunken man; just before the boat went down—only a few minutes—maybe half an hour or so.

Q. What time did you leave Wyandotte—what time of day?

A. It was in the evening, off towards dusk.

Q. That draw rest could be seen easily at the time?
A. Oh, yes; oh, yes, sir.
Q. What time had you passed up through the draw?
A. Well, I disremember; I think it was in the forenoon; we were loaded with ties.
Q. Where did you put off your ties?
A. At Wyandotte; we were loaded with ties.
191 Q. How was it coming down?
A. We were light.
Q. Had you any load on?
A. I don't think we had; sometimes we would keep freight on and put it off as we returned.
Q. What was the stage of water at the time?
A. Well, there was good stage of water there, as well as I can remember.
Q. Were you on watch when you passed up?
A. No; we run the same watch up that we run down. If I had been on watch going up I should have been on watch coming down.
Q. It was in the forenoon that you went up?
A. I think so. I am not positive.
Q. It was in daylight?
A. Oh, yes.
Q. Well, your were in the pilot-house when you passed up through the draw?
A. No; I don't remember being in the pilot-house.
Q. Had you, during that season—that boating season—passed through that draw frequently before?
A. Well, we made two or three trips during the season; I wouldn't say exactly how many, but I know I have been through there two or three times before in that season.
192 Q. Do you know when the pontoons sunk?
A. Only from hearsay.
Q. You had information that they had sunk?
A. Yes; I had heard pilots say.
Q. When did your information say they had sunk?
A. I have forgot when it was and where I did hear it. I heard that the ice had sunk the pontoons at the Kansas City bridge.
Q. How long before this accident—three months or six months?
A. I never paid much attention. I believe it was in St. Louis here that the ice had sunk them as the river broke up—had sunk the pontoons.
Q. Was it in the spring or summer?
A. It must have been in the spring of the year—the breaking up of the river.
Q. Was it in the spring or summer when your boat struck the draw rest?
A. In the spring, towards the first part of the season.
Q. Bob Bailey had been on the boat from the opening of navigation that season?
A. Yes, sir.
Q. And he had passed up through the draw, too, had he?

A. Oh, yes.

Q. And had passed down through it, too?

193 A. I believe he had.

Q. Had you ever passed through on watch acting as pilot?

A. Yes, I had.

Q. What season?

A. That season, the trip before.

Q. Now, did you experience any difficulty in coming down through it?

A. I take notice I was mightily afraid of that upper draw rest.

Q. Well, you were on the lookout and guarding against any accident when you came down through?

A. Any other pilot would be the same way.

Q. Well, I mean you were when you came down through—when you brought the boat down yourself.

A. You don't suppose for a moment that I would be any otherwise?

Q. Well, answer my question.

A. I took an oath that I will pilot the boat to the best of my skill and judgment; sometimes I got through luckily and sometimes I didn't.

Q. You always went through there luckily?

A. I never had any trouble there that year.

Q. Or any other year?

A. No.

Q. You always went through safely when you were piloting through?

194 A. Well, I can't say that I have; my hair has stood up pretty straight a time or two there. I was pretty badly frightened two or three times. One time I came down and the draw wasn't open after night, and I whistled all the way down the bend for the draw. The captain on the roof said the draw was open—that was on a big stern-wheel boat, the Kate Kearney—and I got down so close that I was almost down at this point (indicating) at the upper draw rest. I didn't have time to reverse the engines, and the draw wasn't open, and I backed the boat up against them pontoons, and them pontoons being there is what saved me—what saved the boat from a wreck that night. It wasn't a stormy night. The way I used to tell when the draw was open I could see men run along with their lights, but I hadn't seen nobody run along with lights, and there wasn't room to swing the boat around in.

Q. Tell when you came down through it that same season on this same boat, this St. Luke, you came through without any trouble, didn't you?

A. Well, we had to work hard to get through at this place, but didn't meet with no accident.

195 Q. Did you discover this cross-current when you came through?

A. Oh, yes; I noticed that cross-current there coming down. It has been generally spoken about. The pilots frequently spoke from

one to another about this cross-current and those pontoons making the cross-current.

Q. Bob Bailey, then, knew of this cross-current?

A. I don't know. I can't say whether he did or not.

Q. Did you talk with him about it?

A. I don't remember.

Q. You say it was talked about on the boat?

A. I didn't say anything about its being talked about on the boat. We talked about it generally on the levee, among pilots.

Q. It was plainly to be seen, was it?

A. Well, in going up it was not so p-ain to be seen.

Q. Why not?

A. Because the water in striking the bridge will boil up this way (indicating). When the water strikes that point here and rushing through those curves and draw rest it boils up, so that you can't tell when the current is going up the stream.

Q. How do you tell where the current of the river is?

196 A. There is no regular way of telling the current of that river. Pilots run their boats by their judgment of the water. In looking at it, generally, we can tell where the current is. It is — very difficult matter to do, that, sometimes, to locate where the current is in the Missouri river.

Q. Why is it that you can't tell where the current is in the Missouri river?

A. I didn't say that.

Q. Well, then, you can tell where the current is in the Missouri river?

A. Yes; generally we can.

Q. You steer your boat with reference to the current?

A. Not always. You must always take into consideration the flanking of your boat.

Q. Has the winds much to do with it?

A. Frequently; yes.

Q. How does the wind effect it?

A. It will blow the boat or any boat rounding a bend. It has a tendency to make a boat run into the bank. The wind has to be pretty strong, however, to blow her in on some boats, and again, not so much on others. Some boats are perfect ships in wind and some are not. I can't tell you the difference. They are generally built after the same pattern. I suppose some of them are higher up off the water and catch more wind—more surface exposed—that

197 is, the larger the boat the more effect the wind has on her, unless the pilot overbalances that difference in stronger machinery.

Q. Well, what was it prevented Bob Bailey from passing through the south draw on that occasion without striking the draw rest the south side of the draw?

A. Well, I attribute it to this cross-current from the head of the draw; sometimes it is a little stronger than at others; I wasen't in the pilot-house when we passed up and can't say whether the cross-current was there or not.

Q. The current wouldn't have changed in the course of a few hours, would it?

A. Frequently currents did change in the Missouri river.

Q. Within a few hours?

A. Yes, sir; but that current was already established there; that current has been there for some time.

Q. That current was there the first time you ever went up there?

A. No, sir; it was not.

Q. Don't the current there flow down on the Kansas City side?

WITNESS: Flow down on the Kansas City side?

Q. Yes; against it, the current of the river?

A. Yes; that is the channel of the river.

Q. Comes in close against the shore?

198 A. No; not so very close; running the shape of the bend.

Q. How big a bend is that?

A. It is a bend.

Q. How many degrees?

A. I don't know.

Q. Does it come down from Wyandotte as an elbow; about half of a circle?

A. Yes, sir.

Q. From Wyandotte down to the bridge?

A. Yes.

Q. It has been that way ever since you knew it?

A. It has not; no, sir: I never knew of that before the bridge was up there.

Q. A bend like that in the Missouri river cuts out and naturally keeps cutting away and scours out and reforms?

A. No; it reforms somewhere else; perhaps several miles down below, may be.

Q. The channel of the river is constantly changing, isn't it?

A. Yes, sir; generally.

Q. Moves *sortham* other rivers?

A. The rivers that I have had experience of, yes.

Q. What I want to draw your attention to is that the channel is on the Kansas City — from the mouth of the Kaw river.

199 A. The channel that I recollect is on the Kansas City side from the Kaw river down to the bridge.

Q. There is a rocky shore from the bridge up to this point (indicating)?

A. There is a rocky shore, but how far it extends I don't know; my judgment is, something about a quarter of a mile, I should say.

Q. The river, then, don't cut this rocky shore away any?

A. No.

Q. Well, there is a rocky point above the bridge; about what distance the one that Captain Gould spoke of; how far up now is that from the bridge?

A. Well, I don't know; it is about the same distance, I should think.

Q. What is your judgement about the distance? That is what we want.

A. I stated it is about a quarter of a mile.

Q. Up to this rocky point?

A. Well, the front part of it is a kind of blind point; it is a rounding point; anything is a point in the river with pilots where it comes out sharp or otherwise; anything that looks like a point which is rounding we call a blind point.

Q. Now, this is about how many yards above the bridge—this blind point?

200 A. About 250 or 300 yards above the bridge; I never measured it; I am only speaking from my judgement.

Q. From that, then it runs in an easterly direction, don't it?

A. No; the river kind of turns on towards the south shore.

Q. More than towards the east; from this rocky point it went straight in an easterly direction on down this stream?

A. Yes, sir.

Q. From that point there it is kind of southwest; that is the direction of the river for some distance, isn't it?

A. Yes; no, not such a terrible distance; it makes a rounding point into the bend (here)—a natural bend, sir.

Q. Regular elbow, is it?

A. No; it is not a regular elbow; it is a semicircle like; it don't cut off round; it is a natural round point.

Q. About half round. Is it a semicircle—that means a half circle?

A. It is not exactly a half circle.

Q. I don't mean a full half circle, but it works around pretty well towards a half circle?

A. That is my idea.

Q. That it forms nearly a half circle?

A. Yes, sir.

201 Q. Then, from this point it flows tolerably straight in an easterly direction?

A. Yes, sir.

Q. This bank?

A. I believe it runs east; yes, sir; but the current don't.

Q. The current kind of deflects?

A. Yes, sir.

Q. Coming round that bend it strikes this rocky point and shoots over that way (indicating).

A. Yes, sir.

Q. It shoots the current over in the direction of the breakwater?

A. Well, I don't attribute it to the point; the point alone don't do that; it is not the point.

Q. Would it generally shoot from the point over to this breakwater?

A. A boat don't commence flanking from that point.

Q. It don't?

A. Well, I should say it did not; the current don't shoot it from

that point, because a boat coming down the river is below the point before she commences flanking.

Q. It has to go into this current first before it commences to flank?

A. Certainly.

Q. How far now does it get below this rocky point until it commences flanking?

A. Well, I can't say; I never noticed particularly how far.

202 Q. What is your judgment?

A. Let me have your question again.

Q. What is the distance from this point that you speak of until the head of these pontoons—that distance is about 150 yards, you know—now, what is the distance between this rocky point and where the boat commences to flank?

A. Well, that is the distance, about 130 yards; there is a kind of double current—the current of the river in coming down and a current from the shore, a natural current and an unnatural one; the last is any obstruction in the river to shoot the river, the current, across—make it go outside of its regular course.

Q. Now, striking against this rocky point as it comes down there—it kind of strikes, you know—don't it then deflect it; don't the current of the river strike or float into a southeasterly direction, strike the shore at this rocky point, and deflect from that in a northeasterly direction, in the direction of the draw rest?

A. No; the current strikes the shore all the way coming down from Wyandotte, and the deepest water is next to the bank, until they get to this point (indicating), and just below this point the sediment is filling up in there, and that has made the current go up across the pier.

203 Q. Isn't the natural tendency of the water striking this way to deflect it in the direction of the draw rest?

A. The current don't strike this rocky point; it flows in against it, but it don't strike it in a violent manner; it flows in a general bend.

Q. At the turn of the bend there, don't it keep on in the same direction?

A. No; it straightens round; always did.

Q. Don't it then flow in a diagonally opposite direction?

A. No, sir; not no distance at all; it always straightens out all right down that shore.

Q. Do you get my idea?

A. I think so.

Q. Isn't that the natural flow of water, when it strikes anything from one direction in a diagonal way, that it deflects it in an opposite direction?

A. Not in the Missouri river. I have known a current to keep right round the bend.

Q. But it wouldn't keep around a sharp bend?

A. No, sir.

Q. Well, now, is that the natural flow of water in other respects?

A. Well, a person would think so, but it isn't, in my opinion.

Q. Well, that is the natural flow of water in other respects—I mean other places?

A. It doesn't make any crossing there; it isn't, in my opinion.

Q. Well, answer my question.

204 A. I have answered it. You want me to answer it in a certain way, and I don't want to do that. I say, in my opinion, that is not the natural flow of water at that bend.

Q. Well, were these boats, these pontoons, sunk when you made your first trip up that season?

A. Yes; they were out of sight; they had been in sight before that—the year previous.

Q. Did you observe they were out of sight when you went up the first time?

A. Yes, sir; I observed the current coming from them.

Q. As you went up the first time?

A. Yes, sir.

Q. Could another pilot have observed the same thing?

A. I suppose so.

Q. The current was plain enough to be seen; it was enough to be seen.

A. Very frequently, sir, a pilot sees a current and at the same time can't help himself; it was sometimes more than likely it would be plain enough te be seen.

Q. Wasn't it the same; you don't mean to say it changed?

A. The current will hold its own course, but at the same time show up plainly and at other time- not show up so plain. In a

205 cloudy day it wouldn't show up so plain. Sun and clouds have an effect on the effect of the water. The same current may be there, but it don't show to a pilot as plain, and after night he couldn't see it at all.

Q. Was Bob Bailey pilot every time you went — and down?

A. Yes, sir.

Q. He had the same opportunity that you had?

A. I wasn't up in the pilot-house and don't know. I suppose he had the same opportunity for seeing the current; when I came down it was about dusk; the time when I came through that way before I went up there in the day time; I couldn't say how often he was through.

Q. You could always see it plain enough when you went through; it would be worse in the night to run through that current?

A. Well, I don't think it would be, going up.

Q. Well, going down?

A. As a matter of course, it would be a little more dangerous; there would be more danger attached to it. I should think, having proper light on the bridge and everything, they would come

206 come through all right. I have run all the bridges at night.

Q. What was there to have prevented Bob Bailey from passing through in safety at the time he struck the draw rest?

A. It was the drift prevented him; it was the upper rest of the draw, he struck that and that prevented him from coming through; the cause of that was the cross-current catching the boat, as I said, and the boat flanking out that way.

Q. Well, the current drove the boat out against the draw rest?
A. Yes, sir.
Q. How far above the draw rest did the current strike her?
A. She was going pretty straight then; well, a boat's length or half a boat's length above the bridge she just commenced flanking, and she went right down in the draw and commenced going this way (indicating).
Q. How long was the boat?
A. I don't know exactly; I haven't any idea; I can't say.
Q. How wide was she?
A. Well, I have heard it said she was forty feet deep, but I don't know *but I don't know* whether that was so or not.
Q. Do you know how wide the south draw is at the bridge?
207 A. I don't
Q. Do you know how deep the water is there?

WITNESS: At the south draw?
COUNSEL: Yes, sir.

A. I do not.
Q. Did you ever measure it?
A. I never measured it in the south draw because I was always going up through, and my attention was somewhere else—watching my boat. I never took the lead in that draw.
Q. You could have done so easily enough?
A. Oh, yes; I suppose so.
Q. The lead is what you measure the depth of water with on a boat?
A. Yes, sir.
Q. Well, that is easily done, isn't it?
A. It depends on the men on the boat.
Q. You did it without any particular trouble?
A. Oh, yes; I suppose so; by heaving the lead with a line attached it would be so many fathoms or so many feet.
Q. By whose direction did the men do it—heave the lead?
A. By the pilot's.
Q. You never measured, then, going through the south draw?
A. No, sir. I don't know how deep the water was there; I
208 know it is deeper at the upper end of the draw than near the west end, that would be at the lower end, because it was all filling up; a sand bar was forming there.
Q. That is the rule in the Missouri river?
A. Yes, sir; it is invariably the case.
Q. How deep were these pontoons?
WITNESS: How deep did they sink into the water, do you mean?
COUNSEL: How deep were they from the top down to the bottom?
A. Well, I never was on them. I never paid any attention to them or how deep they were.
Q. Do you know how many there were of them?
A. I couldn't say positively; five or six, I think.
Q. How was the wind that evening when the St. Luke struck?
A. I am inclined to think the wind was blowing on shore; it had

been blowing on shore just above that; we always notice the wind. I made a remark to Capt. Bailey that the wind was over on shore. We were running on the south shore; if we were running on the shore it was over in the southern direction.

Q. Was the wind blowing strongly?

A. No, sir; not to affect the running of the boat; a little
209 wind in a place like that we always pay notice to.

Q. Well, where is Bob (Bailey) now?

A. I couldn't say; I don't know. I have not seen him since last spring.

Q. Was he steamboating?

A. I have heard he was steamboating, on the "Belle St. Louis."

Q. Where did that boat run?

A. She run up the Missouri river.

Q. Well, did he quit running after this accident?

A. I believe he did; yes, sir.

Q. Was he discharged?

A. I can't say whether he was discharged. He was a man that never said anything to me about it, whether he was discharged or quit himself.

Q. Where did he go after the accident?

A. Well, I couldn't say exactly where he went. I was on the boat with him and the captain of the boat. We came down to Lexington; I resided there then.

Q. What did he come down on?

A. On the cars.

Q. To Lexington?

A. Yes.

Q. And you don't know what became of Bailey?

A. No, sir.

Q. He never went back on the boat, did he?

A. I don't know. I continued as pilot for that season on
210 the boat.

Q. Who was the pilot that took Bob's (Bailey's) place?

A. I believe it was Capt. Thomas Townsend that took his place; that is my impression.

Q. What did Bob (Bailey) say at the time of the accident?

Mr. LADD objects to the question.

A. I don't remember anything particular he did say.

Mr. CARR. Didn't he say something?

A. I don't believe he did when she struck; as soon as I saw that she was going to strike I went out on the roof, thinking that she was going to strike on the side. After I found out that she had been damaged and in a sinking condition, I remained on the roof, and I never went back into the pilot-house there after she struck, and when she landed I never seen him any more.

Q. Who landed her?

A. I think he landed her. I never saw him after that.

Q. Well, did the captain say anything about his being dismissed?

Mr. LADD: I object to the question.

WITNESS: No; he did not.

Mr. CARR: Or in your hearing?

A. Not to me, or in my hearing. It is possible that in little conversations it might have been talked about; the subject might
211 have occurred, but I don't know that it was.

Q. When Bob (Bailey) was suddenly confronted with danger didn't he lose his self-possession?

A. I don't know; he was a man. I couldn't be that judge, sir, as I said before.

Q. Didn't he lose his self-possession on this occasion when he found that the boat was going to strike?

A. I think not; he did all that a man could do under the (then) present circumstances.

Q Well, a man ain't responsible that loses his self-possession; that is something a man can't control.

A. Well, there ain't no man in the world wouldn't have got excited about it; I don't know anything about Mr. Bailey's feelings in any way.

Q. How did he act?

A. He acted just as any other pilot would; he done all he could. I believe that acting as he did he saved the boat from being a total wreck and sunk.

Q. Which side of the channel did he come down from the Kaw river?

WITNESS: Which side of the channel?

COUNSEL: Yes; on the Kansas City side or the Clay county side?

A. Well, it is all one from the pier bar plumb into the shore; there is no middle channel there.

212 Q. Did he run on the south side?

A. I couldn't say; I wasn't up in the pilot-house then, I was up in the pilot house just above the bridge.

Q. What side of the channel was he on?

A. Naturally right down past the point.

Q. The point of rocks, do you mean—the point above the bridge?

A. Yes, sir; and started to go on right into the bridge the natural way.

Q. Now, then, which side of the channel was it on?

A. On the south side, consequently.

Q. How wide is the channel there at the point of rocks?

A. Well, I don't know; it may be as wide as from here to the sheriff's office (indicating a building on the opposite — of the street); I couldn't say positively how many feet; I should think it was about seventy-five or a hundred feet wide there; he was on the south side of the channel.

Q. Did he keep on the south side?

A. From the time I seen him he was on the south side; he didn't keep on the south side of it, because he landed against the bridge pier.

Q. How did he run, then, from the time you first noticed him; did he run out towards the north side of it?

A. No, I don't think he did; when I came up in the pilot-
213 house he was heading down on the bridge, and started to go down on the south side; we always run the south side; I never heard of a boat running on any other side.

Q. From the point where the pontoons were fastened—do you recollect that big rock where they were fastened to?

A. Not positively. I know they were chained.

Q. How far was he from that when he got opposite it; how far out to the north of it?

A. Well, I couldn't say positively. He might have been closer than what I would be willing to say.

Q. What is your judgment?

A. The number of feet is pretty hard for a man to say. There ain't one man in a hundred that could tell the number of feet on the river. It may be fifty (50) feet and look like twenty (20) feet. You can't tell on a boat. Of course, when a man looks over the side of the pilot-house he can't see whether it is —. From where we can see we can form a pretty good idea of how far we are from the land. I wouldn't like to say how far it was.

Q. Do you think you were two hundred feet from it?

A. Oh, no; no, sir.

Q. Well, when you run a boat through that draw how far from the—how near to the point of rocks did you run?

A. Well, that is—I can't say. Pilots, as a general rule,
214 would run from that point. That has always been our way, and I think that Captain Bob (Bailey) would do the same way.

Q. How did you run it?

A. As I always run it, to keep off of it.

Q. How far did you run from the point of rocks?

A. Well, I probably might have been fifty (50) feet or — hundred (100) feet away.

Q. When you got down opposite to where the pontoons were fastened how far were you from the rocks then?

A. From the rocks on the south shore—we couldn't go a great ways, because if we did we would have been out against the breakwater. Well, I don't know. I don't recollect. I don't like to say the number of feet.

Q. Give, as your judgment, how far or how near from where the pontoons were fastened.

WITNESS: From the south side?

COUNSEL: Yes, sir.

A. Well, I don't know how far that breakwater is from the bridge. I don't know the distance.

Q. It makes no difference. Give me your judgment.

A. I always endeavored to come down and hold in as close as I could to hug the south shore. The actual distance I couldn't say. I wouldn't like to say that was the best way to go down through.

215 Q. Well, now, about how many feet do you think you were off from it?

A. I can't say; I don't know how far Capt. Bailey run from it.

Q. How far did you run from it?

A. Well, I might have been fifty (50) feet, probably, off from it; I can't say positively.

Q. Is that the best of your judgment?

A. I think so.

Q. Fifty feet from land?

A. No, no; that would throw a man in too close to the shore. I actually hav'n't any idea of the number of feet, and so I don't like to say; perhaps the length of these two rooms (indicating a distance less than fifty feet) from shore, but I really don't know how far that is.

Q. That is less than fifty (50) feet. Give it to us in feet.

A. Well, I suppose it would be about fifty (50) feet from shore.

Q. From where the pontoons were fastened?

A. No; from the shore.

Q. Well, they were fastened on shore, wer'n't they—the west end?

A. The chain was fastened on shore; the pontoons were out in the river.

Q. They commenced at nothing, or the edge of the water, and then gradually run down into the water until they got into the pier No. 1?

A. Yes, sir; the south pier you speak of now. They were chained on the south shore — those piers—I mean those pontoons
216 came right down to pier No. 1.

Q. From the shore?

A. Yes.

Q. And if those pontoons were there——

A. We would run within a few feet of the pontoons.

Q. Was that the right way to run?

A. Yes, sir; that was the safe way. We always did that.

Q. You always did that when you run a boat through?

A. Yes, sir; those pontoons sinking there made a cross-current.

Q. How could that make a cross-current?

A. Well, sir——

Q. How deep was the water there?

A. I don't know how deep.

Q. Wasn't it about (25) twenty-five feet deep?

A. I can't say; I never fathomed.

Q. Well, suppose it was, how could that make a current?

A. I should say it wasn't so deep as that from observation and belief. I have had difficulty in getting in the landing there at Kansas City just below the bridge, and I know the current run up, struck, or commenced at the south shore all along; it was undoubtedly so filled up, and it looked like it was filled up.

Q. That was filled up, wasn't it?

217 A. Yes; but that was not the case above there, but coming out in along like, those docks did on the shore pier, and naturally formed an eddy and filled up below there between the pier and the south shore; between those docks and the south shore it would all fill in.

Q. Suppose the water was from nineteen to twenty-five feet deep, the pontoons were about five feet deep?

A. I should judge so, from observation.

Q. How could that create a cross-current across that channel; wouldn't the water flow over them; the water is much deeper than the pontoons; wouldn't the water flow over them?

A. Not a great while; it would naturally fill up and filling in below them and work up until it goes plumb over them until a bar formed in the middle of the channel, right in there (indicating).

Q. Well, you knew that this bar was forming, didn't you?

A. Well, I knew it was filling up; all pilots knew that it was a difficult matter to go into the landing—that is, we packet men.

Q. Well, that cross-current wasn't any worse when the St.
218 Luke struck the draw rest than when you brought her through?

A. I believe it was.

Q. Why?

A. Well, because the current was stronger than when I run it the trip before that.

Q. You knew the current was there, tho'?

A. Everybody knows there is a current in the river.

Q. I mean this cross-current.

A. Well, there was always a cross-current there.

Q. There hadn't been, as I understand, before the pontoons were there?

A. I mean since the sinking of the pontoons; I didn't mean before.

Q. Why didn't you run through the north side of the draw?

A. I always considered the south side the safest and the easiest side to run through.

Q. Why safer?

A. For about going up stream the south side was considered the best; while if you run the north side after you got up about abreast of the breakwater there was shoal water on the north of that place (indicating), which would naturally make a boat run you against that upper breakwater or draw rest.

219 Q. How far was that shoal water from the draw rest?

A. Pretty close; not over the width of the boat, probably.

Q. How do you know it was so close as that just from the look of it; you never measured it?

A. No, sir; never measured it.

Q. You never run through it?

A. No.

Q. Was the water deeper in the north side than in the south draw; was the water deeper at the time of the accident to the St. Luke?

A. I don't know; I never measured it, but pilots considered it, the north side, a dangerous side, and I believe it is to-day.

Q. You don't know that from any experience yourself?

A. Why, I know that from my judgment as a pilot; my judgement tells me that.

Q. You never run through it—the north side of the draw?

A. No.

Q. Now, wasn't it about five hundred feet from the upper draw rest over to the sand bar there?

A. Oh, it might have been to the sand bar; I don't know.

Q. Wasn't the water deep enough to run in?

220 A. Oh, no; it is my judgment that it was not.

Q. Isn't that sand bar a very abrupt bar for about five hundred feet?

A. No; it is not under the water.

Q. How do you know it is not?

A. By experience.

Q. What is your experience?

A. My experience is (10) ten years as steamboat pilot. I never ran along there except in high water.

Q. I mean in ordinary water, such as was the case at the time of the accident to the St. Luke.

A. I couldn't say how far. I never noticed it that day. I wasn't on watch. I noticed it going down through the bridge.

Q. Where was Captain Keith.

A. He was standing immediately out on the roof. I know I seen him on the roof about the time she struck, or very near it.

Q. Did he give any directions?

A. He did not, to my hearing. I don't know. I couldn't say where Captain Keith was. I know I saw him on the roof at or near the time of the accident. The pilot is sworn to pilot a boat according to the best of his skill and judgment and not according to the judgment of others.

221 Q. Don't the captain have some say so about the matter?

A. He has some say so, but the pilot needn't heed him if — don't want to. As a matter of course, if a man wants to be gentlemanly and always courteous he will always take notice of what the captain says in running the boat, especially if he knows the captain is a pilot, and a good one.

Q. Who was the engineer on the St. Luke when she sunk?

A. I believe McCoy. I won't be positive.

Q. Did you have one or two?

A. She had two engineers, I believe. Abe McCoy was one—no, I couldn't say — was the engineer. I have got them mixed up. I know he was the engineer on the St. Luke when she struck the St. Charles bridge.

Q. Can't you recollect who the engineers were on the St. Luke at the time of the accident?

A. I am under the impression that it was the same as were on it at the time of the accident of the St. Charles bridge; I think Mr. Nelson.

Q. What is his first name?

A. I couldn't say. Tom Nelson, I believe.

Q. He was first engineer?

A. Yes.

Q. Was he on duty?

A. I couldn't say.

222 Q. Who was the other engineer?

A. I don't remember.

Q. Where is Tom Nelson?

A. I don't know. I have heard that he is in St. Louis. He lives here, I believe.

Q. Couldn't you have brought the St. Luke down through the south draw without any accident on that occasion, do you think, if you had been at the wheel?

A. I might have met with the same accident that Captain Bailey did, and maybe worse. There's no telling.

Q. Couldn't you have brought her safely through? I want a square answer to the question.

A. Well, how do I know?

Q. What is your judgment about it?

A. I have got no judgment about it. That is my answer.

Q. Well, you did bring her through on several occasions?

A. I did, although I might have met with the accident the same and worse than Mr. Bailey did.

Q. But you didn't meet with any?

A. No; I did not.

Q. Don't you think you could have brought her safely through on that occasion?

A. I might have and I might not have.

223 Q. What was there to have prevented you from doing so?

A. If I had come down in that draw, like as not, and got caught in that current, I might have just landed just exactly where Mr. Bailey landed her.

Q. Wouldn't you have guarded it against that current if you had been at the wheel?

A. Mr. Bailey guarded against it as much as he could. I don't suppose I know any more than Mr. Bailey did.

Q. I want you to state the facts.

A. I am stating the facts.

Q. Well, couldn't you have brought her safely through on that occasion if you had been at the wheel?

A. I couldn't say, because a pilot never knows what minute he is going to have an accident.

Q. What is your opinion?

A. I have no right to express my opinion.

Q. Certainly you have.

A. One pilot is as good, in the estimation of the law, as another?

Q. But they ain't, as a matter of fact.

A. I considered Bob Bailey, if anything, a better pilot than myself—a superior pilot to me; he had a large experience. I looked upon him as a number 1 pilot. I might have done better and might have done worse.

224 Q. Your judgement was to keep the boat to the Kansas City shore as closely as you could, wasn't it?

A. Yes.

Q. And thereby avoid the effect of that current?

A. We always did that to avoid the draw.

Q. Wasn't that a proper way to come in—as close — the Kansas City shore as you could?

A. Yes, sir.

Q. And thereby avoid the effect of that cross-current?

A. You avoided the effect more or less. It is owing to how the current round those approaches catches you. I have seen boats taken unexpectedly in these places here (indicating on diagram), where the current strikes and rebound.

Q. A boat takes a sheer sometimes?

A. I don't mean a sheer; I mean from the effects of the current. It wouldn't be from a sheer, as running off from a reef or shoal water boats do take sheers, of course.

Q. Now, suppose he had dropped down stern foremost, could he have gone through there safely?

A. He might have. I always considered it safer to go head down. A man has got more control of a steamboat, and under the
225 circumstances, the way everything was, he was safe running it head on.

Q. How much steam was there on at the time of the accident?

A. Well, sir, I wasn't down-stairs. I couldn't have seen the steam guage. I never asked the engineer; I suppose it was he was running with our usual amount of steam, probably, and I don't know that we had any more or less.

Q. It was the usual amount of steam?

A. Oh, yes; we had to use it when she stuck to whip her up.

Q. Did he give any signals to the engineer?

A. I believe he did.

Q. What were they?

A. He rings the bells; when a boat was flanking he would ring the bell on the same side; the opposite wheel becomes the moving power and has a tendency to pull her head around and pull her stern off of it; in this manner (indicating) she was flanking so, and when he saw that that don't pull the flank out of her he rang the other bell and get her through strong, but it was no use; he was too close to it; he couldn't put the power on to keep her off; it was well enough that she struck where she did, for if she had struck a few feet forward she would have sunk.

226 Q. Were you talking to Bailey at the time?

A. I don't remember. I don't believe I was.

Q. Was anybody else in the pilot-house besides you and he?

A. No; I don't think so; no, there was no one in there but he and I. I may have made some casual remark, but I don't know that we were talking.

Q. The draw was open all right, wasn't it?

A. Yes, sir; the draw was open.

Q. In your examination-in-chief you spoke of a current filling up in the draw and making slack water; what do you mean by that?

A. Well, sir, I mean what I have tried to demonstrate all along on the map, that the position that those pontoons occupy now—sunk—forms east of the bridge and down the Kansas City landing forms on the south side of the river shoal water; in going away

from the landing the water seemed to be near the Kansas City side.

Q. Was this slack water about the bridge, too, in the draw?

A. No; it wasn't in the draw; it only extended up about—a little above the bridge, not in shore, not in the draw; in the draw the current run straight right on to the bridge, where the
227 upper rest, where the current strikes the approach at the upper draw rest and along this crib; along in there is sand (indicating).

Redirect examination by Mr. LADD:

Q. At the time you thought you were going to have an accident, were the pontoons floating and in position?

A. They were.

Q. At the time or just before the accident to the St. Luke, how was the boat coming down—in what way—as usual?

A. She was coming straight until she struck this cross-current, and she commenced flanking.

Q. She was coming down as usual?

A. As usual, I should say so.

Q. What do you understand by this point of rocks that Mr. Carr has spoken of? This point of rocks—what is it; describe it to us.

A. It is just a rounding point which carries you right into the bend gradually.

Q. Is it a rounding point?

A. Yes.

Q. Is it a sharp point jutting out into the river?

A. It is the end of the bank. It is the termination of the shore there. It is no sharp projecting point like an elbow; it is
228 what pilots would call a blind point; when you think you are up to it you find you are not.

The plaintiff next read in evidence the deposition of James B. White, which is in words and figures following:

White.

JAMES B. WHITE, of lawful age, being produced, sworn, and examined, deposeth and saith:

By Mr. LADD:

Q. What is your age & place of residence?

A. Thirty-eight years old. I reside in St. Louis.

Q. What is your business?

A. Clerk on the river.

Q. How long have you been clerk on the river?

A. Twenty years.

Q. How long have you been travelling on the Missouri river as clerk?

A. Between five and six years.

Q. Do you know anything about an accident, with the St. Luke, that happened at or near the Kansas City bridge in September, 1864?

A. Yes, sir.

Q. Where were you at the time?

A. I was on the boat—clerk of the steamer St. Luke.

Q. On what part of the boat were you at the time of the accident?

A. I was on the larboard guard, just forward of the barber shop.

229 Q. How long had you been standing there?

A. About the time we left the mouth of the Kaw river; a few minutes after we backed out of Wyandotte.

Q. You were standing there all the time; from the time you left the mouth of the Kaw river until after the boat struck?

A. Yes, sir.

Q. You may state, as near as you can, what the course of the boat was until she struck, from the mouth of the Kaw river.

A. Well, she rounded out from Wyandotte; always did coming down the Kanses bend—the Kaw bend; the usual course was pretty close to the shore, and she rounded off the draw at the bridge as we always done it. When the bow of the boat was about the entrance between the draw pier & the shore pier I was looking & noticing how she was going to go through the bridge when very suddenly the after part of the boat was thrown—was drawn by the current towards the bridge pier—and I saw there was — remedy, that she was going to strike, and I looked at her and I saw her strike.

Q. What did she strike?

A. She struck the draw pier.

Q. Do you mean the pier or the rest?

A. The rest; the draw rest, properly.

Q. Which one, the upper or lower draw rest?

A. The upper draw rest.

230 Q. Have you been through that bridge before on boats as clerk?

A. Yes, sir; very often.

Q. Had you been through there when the pontoons were floating?

A. Yes, sir.

Q. What was your custom, when the pontoons were extended from the pier down to the shore, when they were floating and in position, in going down?

A. Most of the time we ran through above the draw, alongside of the pontoons, and put a line out to let the boat drop slowly through in slacking through, by slacking of the line until she got entirely through the bridge, then let the line go and working her with the machinery; at other times we have run it head on.

Q. Did any accident ever occur, to your knowledge, before the pontoons sunk?

A. No, sir.

Q. I will get you to state again the position of that boat, as near as you can remember, at the time the accident happened or just before.

A. The boat was going down the channel of the river from Wyandotte as they alway- run it. I didn't see any difference until the boat got right close to the bridge, that she was going through the

draw when her stern w as still flanking; she looked as if she was going to strike the bridge and I stood there & saw her strike the
231 bridge, and I staid there & saw her strike.

Q. Did you ever notice or examine the current of the river about that point after the pontoons sunk?

A. Yes, sir.

Q. Did you see whether any change had been made?

A. Yes, sir; after the accident I was at Kansas City all the time she was there repairing, which was between two & three weeks; I went up there above the draw, threw in pieces of wood, and noticed how they would go through the draw, and noticed when they got about abreast of where the pontoons sank they would suddenly draw over towards the pier—the draw pier.

Q. The draw rest you mean?

A. Draw rest & pier; and very often the pieces would float that I had thrown in between the pier that the turn-table rests on and the after draw rest.

Q. You say the after draw rest; do you mean the upper or lower?

A. The lower one that the current went over to—over towards the place that the upper draw rest, and float along down until it was drawn in & go through.

Q. Have you ever run a steamboat yourself, Mr. White?

A. I have steered boats a great deal. Not being a pilot, I
232 have done it for the other pilots while I was there in the pilot-house; I was considered a good steersman; they have gone down-stairs frequently and left me entirely at the wheel.

Q. Had you been in the habit of noticing currents on the Missouri river?

A. Yes, sir.

Q. I will get you to state what, in your opinion, is the cause of that cross-current that you speak of which turned the boat over on the draw rest at that time.

A. I think it was caused by the sinking of those pontoons and allowing them to remain where they sunk.

Q. Do you know of anything like a point of rocks along that shore above the bridge? Just describe the shore as well as you can for a quarter of a mile or more above.

A. The shore from about a quarter of a mile from the bridge up the river is a naturally rocky shore; then this bottom that has been riprapped so as to hold it from washing out.

Q. Do you know of any sharp projecting point within a quarter of a mile of the bridge on the south of point of rocks?

A. No, sir; it is a rocky shore for a quarter of a mile, where it is then joined by riprapping down to protect the bottom of the bank.

Q. How is the course of the river from the Kaw river down to the rocky shore? In what direction does it flow—a straight line?

233 A. No, sir; it is a curve; what we call a gradual bend.

Q. Into the south?

A. Yes, sir.

Q. Well, how is it where the rocky shore commences?

A. It commences to straighten.

Q. In what direction?

A. I suppose to the south; it is not as far as that—the bank of the river at the bridge—as where it is below the Kaw river.

Q. Well, after you left this bend that you have spoken about, what is the direction of the shore down the river?

A. East & west, I should think.

Q. East, down the river?

A. Yes, sir; down the river, east.

Q. You stated that you had been through there before these pontoons sunk?

A. Yes, sir.

Q. After the bridge was built?

A. Yes, sir.

Q. Was this current you speak of as having turned the course of the St. Luke there before these pontoons sunk?

A. I never noticed it there before the pontoons sunk.

Q. Was any trouble ever experienced, to your knowledge, from any such course before that?

A. No, sir.

Q. Who went with you, if anybody, other than yourself, to the scene of this accident to examine that and make these experiments with the current?

234 A. I recollect Capt. Keith was captain of the St. Luke then; the superintendent of the bridge, but his name I don't know.

Q. You spoke of the boat following the course of the channel down from the Kaw river and keeping close to the shore; what shore do you now mean?

A. I mean the Missouri shore.

Q. Well, both are Missouri shores; which do you mean?

A. It is the eastern or southern shore.

Q. The Kansas City shore?

A. Yes, sir.

Q. And the boat, you say, was coming down as in the usual way?

A. Yes, sir; in the usual way; headed right square on the shore pier, trying to run over it.

Q. Is that considered a safe direction to point about there?

A. Yes, sir; always head right square for the shore pier, and the current always throws them in there; there is no danger of striking them; I wish to run just as close as possible to it.

Q. Do you know what effect the sinking of the pontoons has had, if any, on the stage of water along on the south shore below the bridge?

A. It has thrown a current in low water over on the draw rest and piers, and in high water creates a large eddy; they have
235 filled up close to the shore, two hundred feet or more above the foot, and this eddy has a tendency to throw the boat down on the draw-rest pier.

Q. What effect, if any, has been noticed in the landing in Kansas City?

A. It is much shallower and falling off, owing, in my judgment, to the pontoons being sunk and stopping the current from the shore.

Q. You may state before these pontoons were sunk what was the course of the river between the pontoons & the draw rest and what direction was the course of the current.

A. Generally it was a straight current, right through the draw pier.

Q. Were you ever on a boat that went down through the north draw?

A. No, sir.

Q. How long did you say the boat laid at Kansas City after that?

A. Nearly three weeks.

Q. For what purpose?

A. To repair the damage done by coming in contact with the bridge.

Q. You staid there, did you?

A. Yes, sir.

Q. Did all the officers *a men* and crew of the boat stay?

A. No, sir; only those that were necessary to repairing the damage; to help repair the damage done.

236 Cross-examination by JAMES CARR, Esq.:

Q. Do you know when these pontoons sunk, Mr. White?

A. Only from what the superintendent of the bridge told me; my recollection is he told me they sunk in the winter of 1873 & 1874.

Q. What time was it the St. Luke struck the draw rest.

A. To the best of my recollection, it was in September, 1874?

Q. You had been up through the draw frequently during the season, had you?

A. Yes, sir.

Q. Had never experienced any trouble in ascending or descending?

A. No, sir; met with no accident, but always considered it very dangerous after the pontoons sunk.

Q. Well, you knew they were sunk, did you not, at that time?

A. At the time of the accident?

Q. Yes.

A. Yes, sir.

Q. You had generally rounded it and dropped down stern foremost, had you not, in coming down?

A. Not after the pontoons sunk.

Q. Had that been your practice before?

A. Yes, sir; to drop down a line made fast at the pontoons.

Q. The pontoons were in full view, were they, before they were sunk?

A. Before they were sunk; yes, sir.

237 Q. You could see that they were not there?

A. Yes, sir; after they were sunk.

Q. Were they there when you tried to pass through that day?

A. We could see that they were not above water.

Q. Had you been informed, then, where they were?

A. Yes, sir.

Q. Had you been informed that they were sunk?

A. Yes, sir; I went up there to look at them.

Q. They were sunk the winter before?

A. The winter before I went up there *there* to look at them to see what effect they had on the water in there—in the water of the draw.

Q. How wide is the draw?

A. I don't know; I never measured it.

Q. How wide was your boat?

A. Somewhere about sixty (60) feet.

Q. What time was it the boat struck the draw rest; what time of day?

A. To the best of my recollection, it was somewhere in the neighborhood of eight o'clock in the evening.

Q. Was it dark?

A. It was what I call dusk; not perfectly dark nor light either.

Q. The bridge & the draw rest were in full view as you approached it, were they?

A. We could see it.

Q. You could see them easily enough?

238 A. Yes, sir.

Q. Were you looking out?

A. Yes, sir; I was out on the guards and noticed it—how she went through—as I always considered it very dangerous going through there at all, and never went through there but I always took my position out on the guard whenever we went through the bridge.

Q. You went up all right?

A. Yes, sir.

Q. How long before was it that you had got through all right?

A. Some time that day.

Q. What time in the day?

A. I can't recollect now.

Q. Was it in the forenoon or afternoon?

A. I think it was somewhere close to noon, but I can't recollect whether it was in the forenoon or afternoon.

Q. You didn't experience any difficulty in passing up, did you?

A. No, sir; we didn't consider it dangerous, not for going up, on account of the slowness of the boat, the little headway that a boat makes against the stream, against a strong current; but she can't keep up with the intense velocity when she comes down.

Q. The current was as strong as when *when* you went up as when you went down?

A. Yes, sir; but it is more manageable going up stream.

Q. Who was at the wheel going up?

239 A. Mr. Bailey. I think the same pilot. In the Missouri river the same pilot going up stream runs the same river going down stream, which is an established custom of pilots.

Q. He had been through that draw repeatedly during that season, had he?

A. Yes, sir.

Q. Was the river any different that day from what it had been during the whole season after the sinking of the pontoons?

A. I don't know as it was different that day than at any other times at the same stage of water; there was always a difference there—different stages of water.

Q. Well, what was the stage of water that day?

A. My recollection is that it was a medium stage.

Q. Would it be safer or more dangerous at a medium stage to pass through?

A. Well, I consider it very dangerous at any stage without the pontoons for a boat to land alongside of it and drop along the line in the cross-current.

Q. Well, you have not answered the question. Which is the more dangerous—when it is at the stage it was then or when it is lower than it was then?

A. I don't know whether my opinion is much different as to the danger at a lower stage or higher. Pilots always consider it
240 very dangerous. I know I did, and always got out there to see how we would go through, as the boat has to go through with such immense velocity and it is so difficult.

Q. Did you go out so as to be ready to jump?

A. Yes, sir.

Q. In case of accident?

A. Yes, sir.

Q. That was your reason for going out on the roof?

A. No, sir; not particularly, but in case of accident I wanted to be where I could see what was to be done.

Q. You wanted to be out where you wouldn't be apt to get swamped in the water?

A. I wanted to be where I could see how we went under the bridge.

Q. Do you know how deep the water is there in the channel on the south side of the draw?

A. No, sir. It is very good depth of water, from the swift current that flows through it.

Q. It is a very swift current?

A. Yes, sir.

Q. The current is on the south side of the river there, from the Kaw river down to the bridge?

A. Yes, sir; just above the bridge the channel of the river follows the shore until just above the bridge—at the draw where this cross-current begins.

Q. There is a point of rocks up there at the end of the bend or curve in the river about two hundred and fifty yards there or
241 three hundred yards above the bridge.

A. There is nothing there that I call a point of rocks; there is a natural rocky shore for about a quarter of a mile.

Q. From the bridge up?

A. From the bridge up; all the balance of the shore is riprapped.

Q. Don't that make a point about two hundred & fifty to three hundred yards above the bridge?

A. Not what I call a point.

Q. Well, the curve in the river ceases there, don't it, and it runs pretty much east from that down to the Gillis House—the bank of the river runs?

A. Yes, sir; pretty much east.

Q. From what point?

A. Well, you might say from that point, or starting from the point up above there where it is riprapped.

Q. Well, it is in a curve from this point that I speak of, isn't it?

A. It is in a curve from Wyandotte; when you are on a boat you don't notice the curve or that it straightens very much. We start out from Wyandotte & come down the Kansas City shore and keep about equal distance all the way round, following the shore; don't know exactly how many feet, but keep an equal distance all the way down, but it is pretty close to the land, and we keep an equal
242 distance when we come to the natural rock or to the artificial riprapping; it makes no difference in landing on account of the distance that we keep from the shore. We make no distinction in the distance in running a bank from artificial riprapping & the permanent rock shore, and run the draw as we always run it.

Q. First convey the idea of the curve in the river & then the distance above the bridge, where the current ceases, and the bank of the river is in an easterly direction—a tolerably straight easterly direction?

A. Well, the bank of the river runs—it gets straighter as you get nearer the bridge, before we get to this point. Well, the curve isn't straight; it is still a continuation of that of the foot of the bend; the foot of the bend is still below; a part of this curve is down still below, where the permanent rock commences.

Q. Well, state where the bend commences or the curve in the river; is it at Wyandotte or is it south of Wyandotte?

A. The bend commences up there at Wyandotte and circles towards the south & keeps on curving towards the south till you get about the centre of the channel; then it commences to circle out towards the north, and it keeps on in a circle. I would consider that the foot of the circle would be about where the pontoons commenced, somewhere about 300 feet or 360 feet above the shore pier of
243 the bridge and below the foot of where the permanent rock bank commences.

Q. Well, what direction now after the curve ceases; what direction is the bank of the river from the shore—the general direction?

A. In an easterly direction.

Q. Until it passes the Gillis House, below the bridge?

A. Yes, sir; some distance in an easterly direction the bank is, but not the channel of the river; the bank of the river is in an easterly direction, but not the channel.

Q. Now, does the channel of the river commence to recede at the end of the curve or bend in the river—recede in a northeasterly direction from the bank of the river?

A. A very little bit north; very slight—very slightly.

Q. It hugs the south or Kansas City shore from the Kaw river down to where the curve or bend in the river ceases very closely, don't it?

A. Yes, sir.

Q. Well, pier No. 1 of the bridge is how far out into the river?

A. I should judge two hundred feet.

Mr. CARR: It can't be that far. It makes no difference to me, however; it is in my favor.

WITNESS: Well, I never measured it.

Q. From where the bend or curve in the river ceases the channel recedes from the bank or shore, don't it, towards the draw rest?

244 A. There is no channel here (indicating). I never saw it recede until these pontoons sunk in here (indicating).

Q. Wasn't this what you call eddy water under the bridge here and on up some distance from pier No. 1 to the south shore; wasn't it eddy water at the time—from the time of the building of the bridge to the day of the accident of the St. Luke?

A. No, sir; there was a current down this shore.

Q. Didn't the current set in this direction (indicating) and turn round & go down that way?

A. The current was pretty straight there when these pontoons were anchored up here. There was a sort of curve down this shore; good water for steamboat landing until after the pontoons were sunk.

Q. You don't know how deep the water was in the south draw?

A. No, sir; they never heaved the lead going through there.

Q. Did you ever run through the north side of the draw?

A. No, sir.

Q. Do you know how deep the water was in the north side of the draw?

A. No, sir.

Q. Why was it that steamboats always went through the south draw?

A. Because it was more dangerous to run the north side on account of getting into position.

245 Q. Isn't the Missouri river a very difficult river to navigate?

A. Yes, sir.

Q. Ain't there a good many under currents and cross-currents in it?

A. There are at different places; yes, sir.

Q. Well, what effect do they have on a boat when it strikes on them?

A. To make them flank very fast when they are going down the stream; a good deal more so than up stream.

Q. Well, is a boat manageable when it strikes one of those cross-currents going down stream?

A. If there is room enough.

Q. Don't boats sometimes take a sheer on the pilot and run into bank, and run into—on a sad bar?

A. Yes, sir.

Q. It is liable to do that anywhere in the river, isn't it?

A. No, sir.

Q. What parts of the river?

A. It is liable to do it when they have run close to shoal water; they always run from shoal to deep water.

Q. Why does it run away from shoal water into deep water?

A. That is a question I can't answer you the reason; I merely state it as a fact from observation—from what I have seen; I have seen it tried a hundred times, the pilot trying to go on with his boat, but it would run off immediately again, always from shoal water into deep water; I don't know the reason, but I state it from my
246 observation and as a fact it will always run from shoal to deep water; I have seen them try it a whole day and never succeed.

Q. Well, the current of the Missouri river is how wide from the mouth of the Kaw river down to the bridge?

A. I suppose a quarter of a mile; the river is very narrow there; the channel is very confined.

Q. The current is a quarter of a mile wide?

A. I think it is.

Q. Well, now, right at the bridge how wide is it?

A. I don't consider it any wider than the width of the draw.

Q. You don't consider the channel?

A. No, sir.

Q. Well, the draw is placed over the channel, is it?

A. Over the channel & in the channel.

Q. The pivot pier is in the channel?

A. Yes, sir.

Q. Right in the middle?

A. It would be in the middle of the channel if the bridge was away.

A. Well, when it was placed there it was placed in the middle, wasn't it?

A. I don't know; I suppose—I don't know whether it was placed in the middle or not.

Q. Well, which side of the river was the channel on at that time—where the bridge is located; do you know that?

Q. It was on the Kansas City side.

247 *A.* Well, it hugged the *the* river closely until you come to where the bend or curve ceased?

A. Yes, sir; the Kansas City shore closely until——

Q. Until the foot of the bend did it?

A. Yes, sir.

Q. And then you say it just kept along close to the shore here (indicating)?

A. Just kept along a medium distance from the shore.

Q. What do you mean by medium distance?

A. Well, the distance that we ran in the bend above.

Q. It is further out from the shore right at the bridge than it is at the foot of the bend, is — not?

A. No, sir; I don't think it is.

Q. You think not?

A. You see that it is only 110 feet there (indicating); that is water; it is eddy water now, but it wasn't so before the pontoons were sunk.

Q. How far was the landing below the bridge?

A. I suppose it is five or six hundred feet.

Q. Now, which way was the boat headed as you approached the south side of the draw?

A. She was headed for the inside pier, which would be the south pier of the bride.

Q. And how close was she to the bank?

A. I suppose 100 feet or 110 feet.

Q. How far above was she headed for the inside pier—how far above the bridge?

A. I should judge seven or eight hundred feet; as soon as the bridge pier comes into good view.

Q. She was headed that way?

248 A. She was headed that way.

Q. She was headed above there in the direction of the cursent, was she; was she running with the current?

A. She was running with the current, in the channel of the river, about 100 feet from the Kansas City bank.

Q. She kept up that distance till she struck this cross-current, did she?

A. Yes, sir.

Q. And then she flanked?

A. Then she was very suddenly thrown against the draw rest.

Q. Was anything the matter with the boat at the time?

A. No, sir.

Q. Bob Bailey was pilot; was he on wages?

A. Yes, sir.

Q. Where was Capt. Keith at the time?

A. On the hurrican roof.

Q. Was he doing anything?

A. No, sir; he was standing on the roof, where his place called him to be when in charge of the boat.

Q. Did he give any instructions to Bailey?

A. None that I heard.

Q. Or anybody else?

A. None that I heard.

Q. He didn't do anything at all?

A. He was in his position as master of the boat.

Q. He didn't take the wheel from the pilot or come into the pilot-house or give any instructions or commands how to shoot the boat through?

249 A. Not that I heard; the pilot is the highest officer, and he is sworn to do his duty, and I suppose it is his duty without his having any special instructions from the captain.

Q. Didn't the captain give commands to the pilot about managing the boat & running?

A. Whenever it is necessary for making landings he gives orders to "stop here," "go ahead," but ordinarily running the river the pilot is a licensed officer & held responsible.

Q. Is it not as much necessary for the captain *and* command in passing a bridge or draw of the bridge as it is in landing a boat?

A. Let me understand your question. You mean special instructions?

Q. I mean instructions that are necessary for the safe passage of the boat.

A. I suppose he gives all instructions that are necessary.

Q. Well, my question is, Is it not as necessary there as at the time of landing?

A. It is where there is an issue between the captain & the pilot. He gives special instructions; but where the pilot uses his own judgment and comes in conflict with the captain's, and the captain assumes authority of the vessel that they both are licensed for by the same pilots, the pilot notifies the captain of that fact; then the captain can give all necessary instruction for the pilot. The captain then has assumed his own individual responsibility for such instructions in running a bridge the same as running the
250 channel of the river, and I don't see any necessity of his giving any special instructions.

Q. Well, wouldn't it be proper in place of danger like shooting the bridge?

A. Not unless the pilot asked for special instructions; for in going through a bridge they don't generally stop or ring any bells or work any engines going down stream through the bridge.

Q. Where is Bob Bailey now?

A. I don't know; but he resides in Saline Co.

Q. What part of the Co.?

A. I can't give you the exact part. I think it is about eight or nine miles southeast of Waverly.

Q. What became of him after the accident?

A. Well, all the crew not necessary to be on the boat to help repair the damage done—and he was one amongst the number—were paid off and started down the railroad. I don't know whether they came all the way down or not.

Q. Did he pilot any more for plaintiff after that?

A. Yes, sir.

Q. Where was that?

A. Last summer, in 1876.

Q. Where did he pilot?

A. On a steamer—the Joe Kinney, St. Louis, and Kansas City.

Q. He did, how long?

A. I don't know the length of time.

Q. That was the summer of 1876?

A. Yes, sir.

Q. Had not piloted any from the accident up to that?

251 A. No; not that I recollect of.

Q. Was he discharged at the time of the accident or soon after?
A. Not that I know of. He was given what money was coming to him like the balance of the crew; nothing else that I heard.
Q. Who took his place after the accident?
A. I can't recollect. I think Capt. Townsend was one of the pilots after that.
Q. Who was the pilot with him at the time of the accident?
A. Carr Waddell.
Q. He continued, did he?
A. I think he did.
Q. And Bob Bailey didn't?
A. No, sir.
Q. Townsend took his place?
A. I think it was Townsend.
Q. Well, did he quit himself or was he dismissed by the company?
A. I don't know.
Q. Who employs pilots?
A. Captain of the boat.
Q. Who was captain?
A. Capt. Keith.
Q. Where is he now?
A. Captain of the steamer Francis Lewis, Missouri River Packet Co.'s service.
Q. Was Bailey in the habit of getting on sprees?
A. Not in the habit. I never saw him take a drink while on the boat.
Q. He was off the boat, was he?
A. I have seen him, but when not employed, on a spree. I never saw him take a drink on board the boat.
Q. Did he get on big sprees?
252 A. Yes, sir; sometimes.
Q. You never saw him on a spree while he was on the boat?
A. No, sir. He didn't drink any while he was on the St. Luke.
Q. While you were on the boat did he drink?
A. Not while he was employed. He was a man that couldn't work & take a drink at the same time. He took his sprees when he was not employed.
Q. When he took one drink he had to take more?
A. I don't know about that. When he took a spree he took a general spree and everybody knew it. He just went on a spree & didn't pretend to work.
Q. When was the last time that you saw him on a spree before this accident?
A. To the best of my recollection, I should judge, was two years.
Q. Well, when he was suddenly confronted with danger did he loose his self-possession?
A. No, sir.
Q. He didn't?
A. No, sir; I considered him a good pilot.
Q. Well, some men are very good pilots when there is no danger,

but when suddenly danger confronts them they loose their judgment?

Q. Well, I don't think he did. He stuck to his post. I didn't see any evidence of any timidity on his part.

Q. It is not timidity. It is just that a man has no judgment—no good judgment.

253 A. I never saw any evidence of any such effect; I never noticed any such effect on him.

Q. Who was the engineer of the boat at the time of the accident?

A. Thomas Nelson was the chief engineer.

Q. Who was the assistant engineer—the second engineer?

A. I can't recollect, sir.

Q. Where is Thomas Nelson now?

A. I think he is on the Belle St. Louis.

Q. Running South?

A. No, sir; Missouri river.

Q. One of the company's boats?

A. Yes, sir.

Q. Well, how many times had you descended through that draw before that?

A. I suppose fifteen or twenty times.

Q. Who was the pilot when you passed up before that on those times?

A. Edward Baldwin, William Ashby, William Lingo, William Ball, and others, that I recollect at present.

Q. Where are those pilots now?

A. Ball is running — Red river, I believe; Mr. Ashby is running — the Lower Mississippi.

Q. On what boat?

A. St. Helena, I believe; Mr. Lingo is in the city here somewhere; I don't know where; Capt. Townsend is pilot on the Fanny Lewis at present; Baldwin, I believe, is in the city.

Q. Was it dry weather the time of the accident—clear?

A. I think it was, to the best of my recollection.

254 Q. Which way was the wind blowing?

A. I don't think there was any wind to amount to much; not enough, that I can recollect, to make any impression on my mind—to leave any impression on my mind.

Q. But do you recollect which way it was blowing at the time of the accident?

A. No, sir; I do not.

Q. Well, if the wind is high there is more danger than if with a little wind?

A. Yes, sir; if there had been any wind to any amount it would have left an impression on my mind; but it wasn't windy or I would have retained the fact.

Q. Could running against the draw have been prevented at the time of the accident?

A. I don't think it could.

Q. What is your answer to that question?

A. Well, that is a funny question to ask.

Q. No, it ain't; other pilots went through safely; I suppose they (the St. Luke) could have gone through, too?

A. I don't think the boat could have been in any better shape to go through safely than she was, but she didn't; I can't pass any judgment as to whether he could possibly go through safely or not; we done all we could to get her through—all that human power could do.

Q. Who did all that human power could do?

A. Parties that had charge of the boat, whose business it was to take her through.

Q. Might they not have misjudged as to distance?

255 A. I don't think he did, in my judgment; I was out noticing.

Q. Might he not have misjudged?

Mr. LADD: I object to the question.

Mr. CARR: Well, I want an answer to the question anyway.

Mr. LADD: I object to the answer because the answer must be mere guess on the part of the witness as to what passed through the pilot's mind.

Mr. CARR: Could the running against the draw have been prevented at the time of the accident?

A. I don't think it could.

Q. Then why did he attempt to run the boat through?

Mr. LADD: I object to that question because the answer must necessarily be a guess at the motives of the pilot.

A. We had transacted all our business that was to be done at Wyandotte and it was our place to continue to start on our return trip, and we started on it as we had started on it, as we had done often, time and again, from the same point; it was as necessary to go down the river as it was to go up the river.

Mr. CARR: That is no answer to the question.

Question read by notary.

A. The answer is that I can't give answers for the pilot at the wheel; I must — my own. As I said before, it was necessary for the boat to do her business up the river and for her to go down

256 the river. The pilot is licensed and was a competent officer; the captain was also licensed and a competent officer, and it was their place to take the boat down the river. I can't tell anything about their motives. I *I* don't consider it as dangerous any more than it is all the time, especially when the water is good.

Q. If the boat had been turned around stern foremost couldn't she have dropped through with safety?

A. I don't consider it any more safe than it is to go head on. I consider it just as much danger, without the pontoons there to make fast to, to drop through the lines, as it is called.

Q. Couldn't a boat be dropped through without the aid of the pontoons?

A. I have been on boats that dropped through without the aid of pontoons, but while they made it safely they always considered

it dangerous—that is, dropping down stern foremost; that hereafter they would run it head on, as they considered it less dangerous than dropping through stern foremost without anything to make fast to, as it was formerly before the pontoons sunk.

Redirect examination by Mr. LADD:

Q. Mr. White, when a boat is navigating the Missouri river whose business is it to direct her course there to avoid or take ad-
257 vantage of the currents, the pilot or the captain?

A. The pilot.

Q. What is the custom as between the master & pilot as to the immediate management of the affairs of the boat; does the master leave it to the pilot or the pilot to the master?

A. The master to the pilot while the boat is pursuing her regular trip up the river; whenever they come to a landing and wish to loose, round the boat to, get close to the shore, where the pilot can't see just exactly the position of it and the captain wants to stage the boat, then he directs the pilot as to ringing of the bells, "go ahead," "stop her," "back her," & so on.

Q. That is when they are in the act of making a landing?

A. Yes, sir.

Q. In other cases, then, I understand you, the pilot has the management of the boat?

A. Yes, sir.

Q. Of the running of the boat?

A. Yes, sir.

Signature waived.

W. A. M. Vaughn.

W. A. M. VAUGHN, being produced & sworn on the part of plaintiff, testified as follows:

Q. Where do you live?

A. In Kansas City.

Q. How long have — lived there?

A. Since 1865.

Q. What is your business?

A. I am in the grain business.

Q. What was your business in March, 1874?

258 A. I was doing a general commission business and also steamboat agent.

Q. Where was your office?

A. Second door below the Gillis House; that is on the levee, just above Delaware street; I suppose it is 100 yards below the bridge.

Q. Did you know the steamboat "Alice?"

A. Yes, sir.

Q. State whether you saw an accident to that boat on the 4th of March, 1874.

A. I did; some one remarked that the boat was coming down from Wyandotte, and I went out of my door & saw her come down &

strike the bridge; strike the breakwater; the end the bridge rests on where it is swung.

Q. How long had you been on the levee at that time?

A. I was there four or five years.

Q. How did the boat come down as compared with other boats?

A. She came down as all the others came down; I remember nothing out of the usual course; she came in, right straight down in, the current, down to the bridge.

Q. I'll get you to state how you came to take notice of her.

A. In the first of the season I generally go out on the bank to see who comes down on the boats, the clerks & officers.

Q. Describe the accident as well as you can; what you saw of it.

259 A. The boat was coming down; some ice running in the river; I saw nothing unusual in her course; her head had passed beyond the head of the draw rest, and the first I heard was a noise; I saw the boat was swinging around, and after she passed down I saw she had her wheel torn off; I did not know what it was until then; it was on the opposite side from me that she struck, which was the reason I could not see her when she came in contact with the breakwater.

Q. I'll get you to state, if you know, anything about any pontoons at any time previous to that — had been lying there at the bridge.

A. There was a line of pontoons put in there; they were moored to the bank and the lower end fastened to pier No. 1, and boats would drop down, and in going up would put their line out and pass up; these had been there, and the winter before the ice & the other things caused them to disappear, except the upper end of one that stuck out of the water; one floated down below the bridge and one below my office.

Q. One of them got down below your office?

A. Yes, sir; down East Delaware street, and the other one just below pier No. 1; after the accident I went & looked at it; I had noticed their condition before, and had gone up, at the request of the company, at St. Louis and requested Mr. Wise to have them removed, that they were destroying the levee, and his reply was

260 "As soon as high water comes it will wash them all out."

Q. This had been done before the boat came up?

A. Yes, sir; I don't exactly — what time during the winter; it was some time before the boat came up, maybe a month or so; I can't locate the time.

Q. What was the condition of the current right there at that point?

A. There was a very strong current at that point right against the pontoons, and you could hear the roaring of the water for a hundred yards; Capt. Ryder & I went up an hour after & stood on the bank & looked at it.

Q. What do you know about any cross-current?

A. The current set out from there over to the breakwater; there was some mush ice running.

Q. I'll get you to look at the map (map shown witness).

Q. I'll get you to state how the current had floated along between that pier, No. 1 (shows), and the shore up to the time these pontoons had sunk.

A. There was a good strong current there at that time.

Q. What do you know about the depth of water at the time the bridge was built and from that time on?

A. There was deep water there; I don't know the depth;
261 I remember of seeing Mr. Chanute jump in there & get a boy out; there was a tramway that run out there, and a boy fell in and Chanute jumped in and got him out; it was deep water there; the sinking of the pontoons has formed an eddy there; it is slack water there now; there is a very heavy deposit there, but how far that extends in I don't know.

Q. How had that been prior to the sinking of the pontoons?

A. There was good water there then; there is earth there now where there was good water. Slack water extends up 600 feet above bridge. There was good water between pontoons and shore. The dirt runs up 300 feet above the bridge and below the bridge; sand bar where there used to be good water.

Q. Do you know what wind there was that day?

A. Only from the signal book I kept for the Government; it was from the northeast; not very strong.

Q. You say from the signal record; what position; how came you to keep that?

A. I kept it by direction of the Government to denote the change in the river, clouds, rain, and wind.

Q. Do you know what stage of water there was there?

A. It was about seven feet 4 inches above low-water mark; low water means as low as the river ever gets, and high water as high as the river ever gets.

262 Q. How long before this time had the ice gone out of the river?

A. I can't remember; usually the river clears of ice in February.

Q. Do you remember anything about the breaking up of the river, with reference to the sinking of these pontoons?

A. No, sir; I do not. I don't know whether the breaking of the ice sunk them or not.

Q. How long did these pontoons stay there after this accident?

A. My remembrance is they stayed to the next winter. I think they were got out of the ice. I think there is part of them there yet; they might have got out this summer; the one next to the bank is there yet; I don't remember of ever seeing it got out; it is possible it may have gone out. I left the levee in the spring of 1875 and went up on Delaware street.

Cross-examination:

Q. Was the Alice the first boat up that season?

A. Yes.

Q. What day of the month did she pass up?

A. I heard the 4th of March; they generally come up from the first to the tenth.

Q. How long had the ice broken up before that?

A. I could not say that.

Q. Hadn't it only been two or three days?

A. It might have been a week or two. The boats never leave St. Louis until the river is clear of ice.

263 Q. You don't recollect exactly when the ice did clear out?

A. I have no knowledge of that.

Q. You were agent of the company at that time?

A. Yes, sir.

Q. I understood you to say you stood on the bank of the river and looked up the river at the boat coming down; which side of pier No. 1 did you look?

A. I wouldn't like to say that. It is very likely I looked north of pier No. 1. I observed her soon after she left Wyandotte. I could see her all the way down.

Q. How near to the bank did you stand?

A. Maybe 2 feet; maybe four feet. I stood close to the bank.

Q. How far is Delaware street below the bridge?

A. About 150 yards. There is a street above Delaware called Wyandotte. (City map shown witness. Witness shows where his office was, and also Gillis House.) I walked out just in front of my office and looked up to see how the boat was coming down. I could see the boat any time from where I stood. Down by the levee it is a sloap-ing bank; where I stood it is perpendicular. The boat was in sight all the way coming down. I didn't stand & look at it all the time. I saw the concussion. I did not see them go together. I heard the noise when it had struck.

264 Q. The pontoons were sunk when the ice broke up that spring?

A. I don't know whether there was any break-up in the winter or not. There are two break-ups of the ice in a season sometimes. I don't say there were two break-ups that season. I don't recollect how long before this accident that the ice broke up. I know the pontoons were out of line. The pontoons were out of sight, except the upper one. I don't remember whether at the time of the accident these two at Delaware street were in sight or not. I think only one was at Delaware street then. It got down there some time during the winter. It broke loose & floated down, I reckon. I don't remember that the lower one was taken out after it had broken loose the year before. Perhaps if I had had something to call my attention I might have remembered these things. There were two of the pontoons below pier No. 1 at the time of the accident. I don't know the number above. They were all out of sight except the upper one. It was hanging out and dropped down in the river & hung in an angle towards the upper draw rest. Captain Ryder and I went up there and took a look at it and fixed our minds on it. We could only see one in sight, and the end of that was turned up. The lower end of it was swung out. I couldn't say it was fastened to any others. The others were

under water, if they were fastened to it. I pretend to say that this would throw the current over to the draw rest. There was a
265 very short current perceivable to the eye. My remembrance is that the barge was 60 feet long, five or six feet deep, and 18 or 20 feet wide. I don't know the depth of the river at that place. There was 50 feet above the upper draw rest. I couldn't tell the distance from the pontoons to the upper draw rest. I don't know the depth of water; it was about seven feet above low-water mark. The stage of water was that much above low-water mark. I have no idea of the depth of water at pier No. 1. I could see from the pontoons the water flowing over in the direction of the draw rest. I could not say what there was to prevent a pilot from seeing it. I stood where it started; it went clear across to the upper draw rest.

Q. Isn't there a natural rocky formation above there in the curve of the river that deflects the current out?

A. There is a strong current flowing right down the river; there is a bend up in the river there; there is nothing abrupt there.

Q. You go up to this curve, & then it bears southwest, don't it?

A. There is a slight deflection of the bank there; it is not so much northeast & southwest.

Q. It is an abrupt rocky shore from the bridge up to about 500 yards?

A. It is a generally rocky bluff.

Q. Don't this give the direction of the current; don't it deflect the current out more or less?

266 A. If it strikes straight it goes out a little.

Q. You have spoken about hearing this current. Now, I'll ask you if you haven't testified three times before in this case.

A. I have.

Q. I'll ask you if on the first trial you stated anything about this in this case.

A. I think I did; it is possible I did not. I can't say positive; my impression is that I did, but it is only from it being a fact.

Q. Now, I'll ask you if on the second trial you spoke anything about it in this case.

A. I can't say, but my impression is that I did.

Q. Are you sure now you heard it?

A. I am very sure.

Q. You didn't see the pontoons when they were washed out of line by the breaking up of the ice?

A. I might have seen those that showed themselves.

Q. When were those pontoons taken out of there?

A. I don't recollect. I saw Wise going to take one out, but I don't know the time. I saw somebody getting out one or two of them; I don't know when it was.

Q. Now, you say you spoke to Wise about removing them. How soon after this accident was that?

A. It was before there was any boat came up. The company wrote me to see him and have them remove the pontoons. Whether I wrote to the company about them during the winter or not
267 I don't know; I was agent of the company. I am positive

that the company wrote to me to have them removed. I presume the company knew they were there. I don't remember whether it was Ater, Gould, or Whitledge that wrote to me. I feel positive about them writing to me to speak to Wise and have them removed, and that this was before the accident to the Alice.

Redirect examination:

Q. What did the company state as a reason for having them removed?

A. The reason that I got was that they were ruining the levee at Kansas City.

Plaintiff here offered in evidence O'Flaherty & Cases' sketch of the piers of the bridge, showing measurements, & maps Nos. 1, 2, 3 and Tolletts and Marvin's city map, which are copied as follows:

(Here follow diagrams marked pp. 268, 268*a*, 268*b*, & 268*c*.)

269 This was all the evidence offered by the plaintiff.

Whereupon the defendant prayed the court to instruct the jury as follows:

The court instructs the jury that, admitting all the evidence adduced by the plaintiff in this case to be true, it has shown no ground for recovery any damages on either count in plaintiff's petition, and they must find for the defendant on each count.

The court refused to give said instruction; to which refusal of the court to give said instruction the defendant, by its attorney, at the time excepted.

The defendant, to sustain the issues on its part, read in evidence the deposition of Lawrence E. Wise, which is in words & figures following:

L. E. Wise.

1. State your name, age, place of residence, and occupation.

A. My name is Lawrence E. Wise; age, 45 years the 7th day of this month; occupation at that time, was superintendent of the Kansas City bridge—at the time of the accident to the Joe Kinney. I am a barge builder.

2. State if you were in the employ of the defendant on the 4th day of March, 1874, and the 16th day of September, 1874.

A. I was; yes, sir; I began work for them on the first day of Feb'y, 1871, and quit work on the 3d day of April, 1876.

3. State if the river makes a curve from Wyandotte down to near the bridge, &, if so, to what extent and how far above
270 the upper draw rest of the bridge does this curve or bend in the river cease.

A. It curves at Wyandotte and bears south from there—from Wyandotte—running on a regular curve until it comes down to the bridge; it is two miles, we call it, from the bridge to Wyandotte.

4. State how far from the point of rocks is above the upper draw rest of the bridge where the curve ceases or stops.

A. The curve of the river ceases at the point of rocks, running from there about straight east past the bridge, the distance being, from the point of rocks to the bridge, some 400 or 50 feet, to the best of my recollection. I think that is what I figured it up to before & put it.

5. You count that from the upper draw rest, don't you—that distance?

A. What I call the most prominent point of rocks is about between 400 & 500 feet above the bridge: The current of the river follows the south bank all the way arouud.

6. Now, state about where the Kaw river flows into the Missouri river.

A. Just below Wyandotte. The mouth of it is two miles above the bridge by way of the river.

7. Describe the bottom from the mouth of the Kaw river down until you strike this rocky shore.

A. It is a sandy bottom—a flat bottom all the way down until you strike the rocky shore, alluvial soil. It takes, to the best
271 of my memory, about 24 feet above low-water mark to overflow it. The variation in the high & low water in the Missouri river is 37 feet, taking the high water of 1844 as a standard.

8. Now, state about the distance the rocky shore commences above the bridge and how far it extends down below the bridge.

A. It commences about 600 yards above the bridge and extends on down past the bridge to a little below the steamboat landing; the steamboat landing is 400 or 500 feet below the bridge.

9. State if the rocky shore creates any deflection in the current; and, if so, how far above the bridge does the deflection begin.

A. It does create a deflection, yes, by striking the rocky shore—a point which runs out into the river below the big curve.

10. State the direction of the rocky shore, commencing at the upper part of it and extending down to the point of rocks—the course, I mean; the points of compass.

A. Well, the course there along the rocks is a northeasterly direction.

11. Well, does this give the course of the current—the direction of the shore along there?

A. It does; yes.

12. To what extent is the water deflected from this rocky shore out into the channel?

A. Well, you can notice the deflection of it near the centre of the river; from that point it would be about 250 feet, I should
272 say; from that point out.

13. What direction does the current take then.

A. From there it curves around & bears east; runs east and flows down through the draw of the bridge past the steamboat landing in the same direction.

14. How far above the upper draw rest does the deflection in the current cease & the water flow easterly?

A. I should say about 100 feet to where it entirely ceases and runs east—about in that neighborhood.

15. State if the river is riprapped from the rocky shore up to the mouth of the Kaw; and, if so, when it was first riprapped.

A. The riprapping was done by the chief engineer at the completion of the bridge.

16. State if this riprapping was washed any time afterwards; if so, when; and if the washing out deepened the bend any; and, if so, to what extent.

A. Well, the riprap was washed out in the summer of 1872 and repaired. I think the June rise cut it out, and it was repaired immediately at that time, as quick as they could get at it, and it did deepen the bend at several points.

17. State if this deepening of the bend had any effect on the deflection of the water; and, if so, to what extent it affected it.

A. I should think it would have some effect; would induce the deflection of it some; would make the bend sharper; to what
273 extent I could not say; it would make some difference, of course, in deflection from where it was before; the river is governed by the banks; the current is shaped by the banks, of course.

18. State what was the usual place of running in coming down the bend and through the bridge for boats.

A. They always followed the line of the south shore, and ran through the south part of the draw.

19. State how closely they followed or hugged the south shore.

A. Well, they generally hugged it pretty close, so as to give them plenty of room so as not to run ashore.

20. Well, when they hugged the south shore closely could they pass through the south side of the draw with safety?

A. They could; they always did do it until these — which run against the bridge; they didn't, of course.

21. State if you made any soundings of the river at the bridge; and, if so, how deep the water was on the south side of the draw and also on the north side.

A. The water on the south side at pier No. 1, in the ordinary stage, is about 19 or 20 feet, and deeper as you go north.

22. How deep at the pivot pier?

A. I think about 28 feet.

23. How deep at pier No. 3?

A. 35 feet, to the best of my recollection.

24. How deep was the water at the upper draw rest on the south side?

274 A. I think it was 18 feet at an ordinary stage of water.

25. How deep on the north side at the upper draw rest?

A. Well, the water deepened from the draw rest as you went north until it got along about the centre, when it began to shelve out again towards the sand bar.

26. How far was it from the north side of the upper draw rest or how far did the water deepen from the upper draw rest northward until it commenced shelving out?

A. I should think about 300 feet, until it ran out to nothing.

27. Was there any sand bar on the north side of the upper draw rest; and, if so, how far north from it was this sand bar?

A. Well, the sand bar at right angles from that draw rest, at an ordinary stage of water, I should say was about 600 feet, until you run out.

28. Was there anything to prevent a boat from running through the north side of the draw with safety on the 4th of March, 1874?

A. I don't know of anything to prevent them from running through at that time.

28½. Was there anything on the 16th day of September, 1874?

A. There was no obstruction, then, that I know of. I was not there when the steamer St. Luke struck. I was uptown when that occurred.

275 29. Did you see any boat run through the north side of the draw.

A. I have seen the steamer Fanny Lewis, of the Missouri River Packet Company, running through once, and I have seen two mountain boats go through. I think that is all. Stern-wheelers—we call them mountain boats there; they run up to Benton.

30. How were the boats which passed through the south side of the draw with safety headed; towards what point of the bridge?

A. Well, they always headed on pier No. 1 when they passed through the south draw with safety.

31. What time did the Alice pass up and at what time did she return on the day of the accident to her?

A. I can tell by reference to my book; it was on the 4th day of March, 1874; the Alice passed up at one o'clock and 50 minutes a. m.; the Alice came down at eleven 30 a. m., the same day.

32. State if you saw her coming down; and, if so, where you stood.

A. I stood on the centre of the draw, sir.

33. Well, state if you saw her coming down.

A. I did see her coming down all the way from Wyandotte.

34. Now, describe how she came down—which side of the channel?

A. She was running on the north side of the channel to keep clear of the running ice that was running at that time as much as possible.

276 35. Well, state now to what extent the ice was running and when it commenced to run.

A. The ice commenced running at 3 o'clock and 30 minutes in the morning when the ice broke up above Wyandotte. When the Alice went up there was no ice running; it had broke loose just above Wyandotte three days previous to her running up to Wyandotte. It was that ice that sunk these barges that left that portion of the river clear from Kansas City up to Wyandotte.

36. Now, state if she was the first boat up that spring.

A. She was the first boat up that spring.

37. Well, now tell about the ice breaking loose in the night after she passed up.

A. It was running very heavy in the morning when I came down to the bridge and continued running, but kept growing less until along in the afternoon, from that on until evening, generally less after the first barge ran out.

38. Now, describe the ice at the time she attempted to pass through the south side of the draw.

A. Well, the south side of the draw was running a little more than full of ice, so that part of the ice had to run through the north side of the draw. The north side of the draw was nearly half full of ice.

39. Well, describe the size of the cakes, the kind of ice it was.

A. Well, sir; it was old Missouri river ice cakes, varying from small pieces to ten or 12 feet square and about eight inches thick.

277 40. Now, describe the boat's running down alongside of this floating ice.

A. She ran on the north side of it as much as she could to keep clear of the heaviest ice in coming down until she got within about 40 rods of the draw rest, when she began to head in for the south channel and the ice crowded her. She got in just far enough to catch her wheel and take the wheel-house out. The damage is just about the same as it is in the Kinny.

41. State if she had continued in the course she was running if she could have run through the north side of the draw with safety.

A. I think she could. There was but very little ice running there. It was running nearly half full, but there was no regular jam there as there was on the south side.

42. Was there enough ice running in the north side of the draw to prevent the boat running through?

A. I don't think that there was enough there to have effected her materially.

43. Which way was her bow heading until she turned her bow southeasterly to go through the south side of the draw—at what point of the bridge was she heading for?

A. Well, she would be heading in a straight line with the draw when the draw is open. That would be nearly east & west—the way the line of the draw is when it is open.

44. Was her bow turned a little to the northeast before she got down to it?

278 A. Well, no; I think her bow was headed about east.

45. I mean before she turned into the ice. Just before she turned her bow southeast—how was she heading then?

A. I should think she was heading just about east. Before she made the turn her bow headed for the upper draw rest.

46. How far above the upper draw rest should she have commenced to have turned into the floating ice in order to have run through the south side of the draw with safety.

A. I can't answer the question. I am not a steamboat man.

47. Describe the pontoons on the south side of the south draw—how many there were there & how they were fastened.

A. There were five of them in number. They are from 18 to 20

feet wide and from 50 to 60 feet long—about five feet in depth, I believe. They were fastened to pier No. 1 by a cable chain, keeping the north side of the barges flush with the north side of the pier, and the upper end was fastened to an eyebolt in rock, with a wire cable to the upper barge. Originally there were six, but one had been shoved out by the ice the year before. There were six barges placed there by the chief engineer upon the completion of the bridge, and one of them had been shoved out by the ice and sunk the previous year.

48. State where that barge was, then, at the time of the accident.

279 A. It was between pier *pier* No. 1 and the shore, right under the bridge.

49. Was it in sight or out of sight?

A. Well, that one was up out of the water at the time, but the balance of them were portions of them out of sight; but the south line was in sight. They were turned up on a kind of an incline.

50. About how much was exposed to view at the time of the accident?

A. Well, the upper one was the most in view. I think, to the best of my knowledge now, about one-half her deck was in sight, looking at her from the draw. As they approached the pier they grew less.

51. Then there was a portion of all of them in view, was there?

A. Yes; there was on the south side at that time; they could not entirely sink on account of being blocked up underneath with ice. They could not sink until the ice ran out, and that let them gradually sink down—that is, the rear ones.

52. State on what line they were partially sunk.

A. They were laying in the same position as they were when afloat—that is, in the same line. They were fast at both ends at that time, up & down the river.

53. Parallel with the current?

A. Well, the west one of them, of course, extended to shore farther than the stern, leaving a bell-mouth opening at the entrance.

54. What was the stage of the water at the time of the accident to the Alice?

280 A. I have not got that in my memorandum. I will have to give you the best of my knowledge on that. To the best of my knowledge, on my *juge*, I think it stood in the neighborhood of eight feet; near that. I did remember the exact thing when I was in court at Independence, but I didn't take any note of it.

55. What was the stage of water at the time of the accident to the St. Luke?

A. I know nothing of the accident to her. I didn't see it. I could not say as to the stage of the water.

56. Well, as near as you can.

A. Well, the water at that time—the water, as usual, gets low, and I think it was somewhere between 4 & 5 feet on the g-age, to the best of my recollection now, above low-water mark.

57. Were these pontoons in sight at the time of the accident to the St. Luke?

A. I could not say whether they were or not. I don't remember. I think, perhaps, the upper one was—the upper corner of it; but I am not positive about that.

58. Did they make any cross-current at the time of the accident to the Alice?

A. I think the barges never did create any cross-current. I should say no, they did not.

59. Now, at the time of the accident to the St. Luke did they make any cross-current?

A. Well, they lay in the same position; I should say they did not. I never saw any cross-current created by them laying there.

60. Was there any current at the time of the accident to the Alice, except the one caused by the deflection of the water from the bend of the river?

281 A. I don't know of any. The ice was flowing on the south shore all the way down from Wyandotte.

61. Do you recollect the direction of the wind at the time?

A. I do not; no, sir; I didn't make any memorandum of the wind at that time.

62. Did any accident happen to any other boat or boats whilst you were superintending the bridge except the Alice, the St. Luke, and Jo Kinney?

A. No, sir; not during my time of staying there.

63. State if there were other boats passing through the draw; and if so, about how many besides the plaintiff's boats?

(Objected — as incompetent & immaterial.)

A. Well, I could not tell without looking at my book to make a calculation from that; I think, at a rough guess, in the year 1874 the number of boats up & down would be about 150 steamers passing up & down of the different companies.

64. State the precise number of days the pontoons sunk before the Alice struck the upper draw rest.

A. I don't think I could give you the precise number of days, but I think it was in the neighborhood of about three days before the accident, to the best of my knowledge; I had a book in which I kept the stage of the water and the breakage of the ice and so on, but I have lost it.

65. In regard to the piers being built parallel with the current, state how that was.

282 A. Well, as I said before, the piers were placed parallel with the current, to match it at all stages of the water, as near as they could be.

66. State if the boats which went through the north side of the draw experienced any trouble in going through it.

A. The mountain boats which went up passed through without any trouble; the Fanny Lewis backed through; I did not see that she had any more trouble in backing through there than she did through the south draw; she would frequently back through the south draw.

Cross-examined:

1. Did you, Mr. Wise, testify on the first trial of the case of the Alice, with respect to the Alice?

A. I did, sir.

2. When was it first tried?

A. In March, 1870; some time in March, anyhow.

3. When did you first meet Mr. Carr in Portland?

A. On last Saturday morning.

4. Did he at that time exhibit to you a deposition made by you in any of these cases with reference to steamboat accidents?

A. I think not, sir; I don't think he has any depositions of mine in the case of the Alice.

5. Did he at any time exhibit to you what purported to be a statement of the evidence given by you on the first trial of the case?

A. Not of the Alice.

6. Did he exhibit any deposition or statement made by you
283 heretofore, either in the trial of the Alice or the St. Luke?

A. No; not the St. Luke, because I knew nothing about her.

7. Did he not exhibit or read over to you or cause you to read what purported to be the testimony taken with reference to some of these cases?

A. I only look- over Mr. Yeager's in regard to the Jo Kinney.

8. Did you not state to-day, in giving your evidence in the case in which the Missouri River Packet Company were plaintiffs and the Hannibal & St. Jo Railroad Co. were defendants, in reference to damage to the Jo Kinney, state in that case that you had read your own statement and also the statement of one Yeager?

A. I read over the statement that I made to the company in regard to the Kinney.

8. You now say that the statement of what purported to be your testimony in respect to the Alice heretofore given by you was not exhibited to you by Mr. Carr prior to your testifying here to-day?

A. I think not, sir. I don't remember of seeing any such statement with reference to the Alice.

10. Did not Mr. Carr request you to read over yourself these statements?

A. He said I might read over this Yeager statement.

11. Was not that for the purpose of enabling you to refresh your memory with respect to the facts of the case?

A. Well, of course, it refreshed my memory to a certain extent.
I wanted to see how it corresponded to my statement that I
284 had sent to the company, because I didn't propose to vary from my statement that I had sent to the company.

12. Did you not to-day in this office, in your testimony this day taken, with reference to the accident to the steamboat called the Jo Kinney, pending between the same parties as in this suit, state that the only deflection that you knew of in the current of the river was from the point of rocks, about 400 feet above the bridge?

A. That is all the deflection I know of. I think I did so state something to that effect.

13. Do you know of any other deflection in the current above that?

A. I don't, sir; it is at its greatest point there. There is a gradual deflection from where the rocky shore commences, but this is its greatest deflection.

14. Do you wish now to be understood as saying that the only perceptible deflection in the current of that river where it sets along the south bank is at the point of rocks, which you say is about 400 feet above the bridge?

A. Yes, sir; where the river strikes the bank of rocks, of course, there is a gradual deflection, revertment, to it all the way.

15. I will ask you if the ice on the day in question did not abrade the rocky bank of which you speak the whole way down to the pontoons?

A. Yes, sir; there was ice shoved on the bank all the way round.

16. Was not the principal portion of the ice and current
285 hugging the south bank all the way down to the pontoons?

A. Yes; it always follows the south bank all the way round.

17. Then when you speak of a deflection taking place the ice did not follow*ing* that deflection?

A. No, sir; the ice extended so far out in the river that in overcame that at that point & kept it straight on the south shore.

18. On the day that the accident happened to the Alice when did you first notice her?

A. I noticed her when she left Wyandotte, because I was watching for her to come down.

19. You could see her for two miles?

A. Yes, sir.

20. How wide was the float ice; from what portion of the river did it extend?

A. Well, it covered the largest half of the channel—that is, at the time they came down in the morning it covered the whole river.

21. Did not the greater portion of that ice floating in the river pass through the south draw of the bridge?

A. Yes, sir.

22. Are you able to testify that the Alice came down on the north side of that ice?

A. Yes, sir—that is, when she came around the point so that I could see the position she was running in.

23. Was not she coming in the ordinary position in which vessels do which are navigating that steam at the time you saw her there?

A. She was in the ordinary position, but way out north of the channel; she was running out to keep clear of the ice as much as possible.

24. How far was it until you saw she headed in toward the south draw?

286 A. About 40 rods, to the best of my recollection.

25. Then she had crossed the deflection of the current of which you speak at the time she headed in, had she not?

A. No, sir; not at that time; she hadn't yet; the largest deflection was between her & the draw rest; she was not down far enough.

26. Specify the angle which the deflection of the water you speak of formed with the south bank; specify the angle of deflection.

A. It would be northeast.

27. About what angle—how many degrees?

A. I don't know that I could answer that; it is not a very great deal; I could not say as to the number of degrees.

28. Would it be an angle of 45 degrees?

A No, sir; it would not, nor half of it.

29. An angle of 23 degrees?

A. I don't think it was as much as that.

30. State about the number of degrees.

A. Well, it was so little that I could not fix it at any point. I called Judge Gayes' attention to the foam running in the river. I think that was on the day of the trial as we came home from Independence. He walked up on the bridge with me, and I showed him that the foam all run where the current was, and the line of the foam run through the draw.

31. Did you not upon the former trial—the first trial of the case of the Alice—testify that the Alice came down on the north side of the ice until she got within 30 rods of the head of the draw
287 rest, when she turned her course south & tried to get into the ice; that she was, when she turned to your right, looking up the line of the draw rest, or words to that effect?

A. I won't say whether I said 30 rods or not. I have got it marked 40 rods on my books, as I stated to the company, and I rather think that I made that same statement there in court; I think I did; I might have made a mistake & said 30 rods.

32. Did you state all the rest I have mentioned with the exception of the 30 rods?

A. Yes, sir; she would be to the right on the north side of the river; that would throw her to my right when I was looking up the river at her.

33. Well, did you so testify?

A. I don't know but what I did, sir; she was to my right looking up the river, but I won't say as to the 30 rods.

34. Did you, on the first trial of this case in reference to the Alice, testify as to what was stated in the preceding interrogatory, with the exception that perhaps you said 40 rods in the place of 30?

A. I think, perhaps, I might have made that statement with the exception of that; I could not remember now.

35. Can't you remember whether you made the statement or not; yes or no?

A. I could not remember, because I don't remember the question being asked me.

36. Well, I will now ask you, Did not the Alice come down on the north side of the ice until she got within 30 rods of the
288 draw rest, and did she not turn her course south & try to get into the ice?

A. Yes, sir.

37. And when she turned she was to your right looking up the line of the drawer rest?

A. The line of the draw rest runs east & west; no, sir; she was not looking up the line of the draw rest, because the line of the draw rest runs east & west.

38. Was she not turned to your right, you standing in a position to look up the line of the draw rest.

A. She was to my right, yes; on the north side of the ice partially in the ice.

39. You now say, then, that she was to the right, to the north side of the ice, to your right hand, as you looked up towards her along the line of the draw rest?

A. That is what I claim, to the best of my knowledge; she was headed south; she had to head south in order to run into the ice; the draw rest runs east & west, or nearly so.

40. Would not that point you speak of locate that vessel on a sand bar?

A. No, sir.

41. Did you not, in your testimony on the first trial of this case, testify in open court before the court & jury, "Night before last I saw a slight current running out from the point of rocks, to which the pontoons were fastened, towards the draw rest; the foam followed the current all the way down the south shore until it came opposite the draw rest, and then veered out," or words to that effect?

A. I think, perhaps, I did; it would be impossible for me to remember all these questions which they asked me in court.

289 42. This cross-current of which you speak was caused by this point of rocks some 400 feet above the bridge, was it not?

A. Yes, sir.

43. Is the current which you say commenced about 400 feet above the bridge crossed by any other current?

A. There was a current that came through that channel on the sand bar at the time of the accident to the Alice that would strike the Missouri river at a distance of about 80 rods above the bridge; that put in at that point about 80 rods above the bridge.

44. If this was the case was not the cross-current of which you spoke neutralized by that?

A. I think it was to a great extent, because the ice hugged the south shore all the way down until it passed through the draw, but that old channel has become extinct altogether now.

44½. Did you, upon the former trial of the case, state anything about any cross-currents commencing about 600 yards above the bridge?

A. I don't know but I did. I might have spoken of the same current through the channel across the sand bar. I may have spoken about that. I don't remember now whether I did or not.

45. Was not the only current to which you testified upon the former trial of this case that current or deflection caused by the point of rocks some 360 or 400 feet above the bridge?

290 A. I think that is all I had reference to, is the current made by the point of rocks. I don't remember any questions

being asked in regard to the other. I can't remember all the other questions that were asked.

46. Did you mean to say in your direct examination that the rock formation commenced 600 yards above the bridge, or that the deflection commenced at that distance?

A. I had reference to the rock formation commencing at that distance.

47. You don't wish to be understood as testifying that there was any deflection commencing at that point?

A. No, sir; I don't wish to be understood in that way.

48. Then the only cross-current you know of is the one which you say starts out at the point of rocks?

A. Yes, sir.

49. At the head of the pontoons?

A. Above the head of the pontoons.

50. How far?

A. Well, the sharpest point of rocks extended into the river was about 150 feet above the upper pontoon, to the best of my knowledge now.

51. Is that the point of rocks to which you now allude, the one to which the pontoons were fastened?

A. The rock that lies a little below that point, on the side hill. This rock extends into the river, while the rock the pontoons were fastened to was about two-thirds of the way up the bank from
291 the water to the top of the bank where Broadway comes down.

52. How far is this rock to which the *the* head of the pontoons were fastened above the draw?

A. I should say it was about 350 feet above the bridge.

53. Were any of those pontoons less than 50 feet in length?

A. I don't think they were.

54. How many of them were over sixty feet in length?

A. I don't know how many of them there was.

55. How long was the cable on the last pontoon?

A. I should think it must have been 60 or 70 feet long. You mean the cable fastening the lower pontoon to the bridge?

56. Yes.

A. Well, there was a cable chain which I expect was in the neighborhood of 40 to fifty feet long; that we could take out and draw in, according to the stage of water; it was fastened to an eyebolt on the north side of pier No. 1.

57. Was there not some play allowed between each pontoon?

A. There was when they were first put there.

58. How much?

A. Well, I couldn't say exactly; it was but little; in the neighborhood of about a foot or so, at a rough calculation; just so they would have a little play.

59. Was it not as much as two feet?

A. I think not as much as that; it might have been that, but very little —. A man walking along in an ordinary walk would step across from one to the other.

292 60. How long was the upper cable by which the pontoons were fastened to the point of rocks?

A. I should say about 70 feet, guessing at the distance.

61. How many pontoons were there originally?

A. There were six, but there were only five of them there at the time of the accident to the Alice.

62. At the time of the accident to the Alice you say you could see all five of the pontoons?

A. I think the south side of the whole of them was partially in view.

63. Well, had not the lower portion of the upper pontoon, for a certain purpose, been pushed out into the river so as to present to view to a person on the bridge the left-hand side of the pontoon looking up stream?

A. Not from the draw; from the south end of the bridge you could see the south side of the pontoons always; you could not from the draw.

64. Was not the upper pontoon seen somewhat transversely with the current at that point?

A. No, sir; it was held by the cable so that it could not swing around, because they were fast at both ends and both together with heavy timber on the outside and timbers on the deck.

65. You state that the ice caused them to sink?

A. Yes, sir.

66. Did a large amount of ice collect there at the time they sank?

A. The ice crow-ed at that point, yes, and crowded under
293 them heavily and against the sides of them so that it was all full up underneath there so that they could not entirely sink out of sight on account of their being blocked up with the ice.

67. Did you not, on Monday, the 3d day of April, 1876, while sitting with Capt. R. J. Whitledge, of St. Louis, on a piece of timber on the levee at Kansas City, Mo., while the Jo Kinney was laying in that river undergoing repairs, after her collision with the bridge, say to Whitledge that you kept the pontoons up as long as you could; that they were so rotten that they went under; that they were old things when they were put there; that you notified the railroad company of the condition of the pontoons; that they were not safe, and that it was not your fault that they sank, or words to that effect?

A. I have no recollection of having such conversation with Capt. Whitledge, because I don't know him.

68. Will you swear you had no such conversation with any one?

A. Well, I won't swear that I did or didn't; I don't remember any such circumstance; Capt. Whitledge I don't know.

69. Did you keep the pontoons up as long as you could; were they so rotten that they went under; were they old things when they were put there; did you notify the railroad company of the condition of the pontoons—that they were not safe?

294 A. I did keep the pontoons up as long as I could; the bottoms of them were pretty old, and the ice jam-ed, of course, so it sank them; they were boats that had been used for boating stone from the Kansas City shore for building these piers during

the time of the construction of the bridge, and afterward they were remodeled and placed in that position. I expect that I did notify the company that the pontoons were not safe, because it was my duty to notify them of everything of that kind that needed attention, but I don't remember of having this conversation with Capt. Whitledge, because I don't know him.

70. Was not the current, this current, caused by this point of rocks, which was about 400 feet above the bridge there at the time the bridge was built?

A. Yes, sir; that same point was there when the bridge was built.

71. It is only at high stages of water that — current is overcome, is it?

A. Well, it is not so sharp a current as a great many people think.

72. I asked you this: It is only at high stages of water that the current is overcome?

A. It is entirely overcome at a high stage of water.

73. Ordinarily, it is not overcome, is it?

A. Not entirely; no, sir.

74. Then there is that current there during the whole of the year nearly, is there not?

295 A. I should say there was, except during the June rise, when the water gets high enough to run over the sand bar.

75. This current sets transversely across the river, does it not, so as to strike above the upper draw rest?

A. It sort of angles in that direction towards the draw rest, but don't enter*ed* as far over as the draw rest.

76. Does not this transverse current form an obtuse angle with the point of the upper draw rest?

A. No, sir; it does not.

77. State what kind of an angle it forms with the draw rest?

A. Well, I can't answer what the angle is—every small angle that it forms; I couldn't give the angle; I am not a civil engineer.

78. Do you know how many degrees a right angle contains?

A. Ninety degrees is a right angle.

79. If you know, then, what a right angle is—how many degrees it contains—state how many degrees' angle this transverse current would form with the point of the draw rest, about how many?

A. Well, sir, that is a hard question for me to answer; it is but little; I should not think it would be an angle of more than five degrees from that point, and that would be a very small angle; I don't know that it is as much as that.

80. Can you explain how it is that on the evening in ques-
296 tion the ice should have been floating down on the south bank of the river, and why it failed to follow the deflected current?

A. Well, I don't know, unless it was the crowd of the ice; that deflection in that current is not great enough to set the ice out there by a long chalk.

81. Have you received any promise from any one to pay your expenses for coming here to testify to-day?

A. Mr. Carr told me he would pay me for my time.

82. When did he make that promise?

A. On Saturday—last Saturday.

83. Did he not say that he would make it worth your while to come down & testify?

A. No, sir; he didn't make any such answer; we made no special price; he was to pay me what my time was worth.

84. What do you expect your time is worth to-day?

A. I call my time worth 4.50 dollars a day.

85. Were you ever subpœnaed to appear here and testify in this case?

A. No, sir; it was just by accident that I met Mr. Carr on Saturday; I didn't know he was in town; I don't think he would have known me if I handn't spoken with him first.

86. Prior to the time these pontoons were sunk by the ice had there been any accident there?

A. None prior; no, sir.

87. But three days after they were sunk this accident did happen to the Alice?

297 A. Yes; I think it was about three days after.

88. Some time afterwards then there was another accident happened there?

A. That was in the fall—to the steamer St. Luke.

89. And some time subsequent to that another accident happened to the Jo Kinney?

A. Yes, sir.

90. Did they not all happen by the striking of the steamer on the draw rest?

A. Yes, sir.

91. Prior to the accident to the Alice had not boats gone through—a good many boats gone through?

A. Yes, sir.

92. Always without damage?

A. They never had any damage before that; no.

93. What were the pontoons placed there for originally?

A. They were placed there for steamers to drop alongside of to pass through the draw in a heavy south wind or a heavy north wind—either one. In a heavy north wind the wind used to hold them up to the line of the barges, and they could pass through without striking the piers.

94. Now, just please repeat and state, as near as you can, what you said with reference to this accident to the Alice, as to how it occurred and what the parties on board were doing, as near as you could tell from where you were.

A. Well, I couldn't tell what the parties on board were doing. There is not generally anything in particular doing on board of those boats when they are running to land.

95. You say it was about 40 rods above the cut-water when she began to *to* turn in?

298 A. Yes, sir.

96. How did she head at that time when she began to turn in?

A. She would be headed in a southeast course.

97. If the current was at that time as you say, going over the sand bar, would she not be going directly with that current when she went into the ice?

A. Well, it was the ice that occupied the whole space between the steamboat and the south shore that kept her crowded out.

98. Did you go down to examine the ice at the time of the accident?

A. I did not examine it any more than looking at it in passing through.

99. Did you measure any of the pieces to know how thick they were?

A. Only by the eye, looking down upon them from the bridge.

100. You say that a portion of the north side of the draw was clear from ice?

A. A portion of it.

101. Was not a portion of the south side of the draw clear from ice also?

A. No, sir; not at that time. It was running full, more than full, so that part of it had to go through the north side.

102. Did you not testify on the first trial of this case that the Alice, you thought, was trying to get through the north side of the draw, but that when within a short distance she suddenly
299 turned her nose south into the mass of fload ice?

A. I don't think I did make such a statement, because I thought she was coming through the north side the way she headed.

103. Now, you call a short distance 40 rods, do you?

A. Yes, sir; had there been no ice running she would have made it all right if the ice hadn't crowded her.

Redirect examination:

1. As I understand, you testified that there was a cross-current from the old channel which met this deflected current?

A. There was a cross-current coming through the old channel on that day, because there was some ice running through the old channel.

2. Well, was it strong enough to be called a cross-current?

A. Well, it would make a cross-current; it would strike the Missouri river where it came in at about an angle of 45° degrees, I would call it.

3. It would be too weak, would it not, to have any effect on this cross-current?

A. It would be too weak to extend clear over there at that stage of the river.

4. You never spoke of that on the other trial, did you?

A. I don't remember of saying anything about it.

5. State, in your judgment, if this current from the old channel had any effect *recatratiying* the cross-current or rather the current created by the rocky shore.

300 A. I should say not; it was not high enough to do it at that time.

Recross-examination:

1. You say in answer to last interrogatory that it would have no effect towards neutralizing the other current. I will ask you if when a force—if a body moving in one direction meet a body moving in another, if you don't know it is bound to have an effect upon it?

A. Well, if it is large enough; but this was not large enough at that time. The body of water was not heavy enough to extend that distance out.

LAWRENCE E. WISE.

Fountain.

The defendant next offered the deposition of JERRY FOUNTAIN, which is in words and figures following:

My name is Jerry Fountain; age, (44) forty-four years; residence, San Francisco, California; occupation at present, a glove cleaner. I was engineer on the Kansas City bridge, across the Missouri river at Kansas City, from the latter part of the year, 1869, until Jan. 6th, 1875. I left January 6th, but quit work on the 1st of January, 1875. I came directly from Kansas City to San Francisco and have been living here ever since. I was on the drawbridge the day when the "Alice" (steamboat) came down from Wyandotte and attempted to pass through the south side of the draw. I acted as engineer
301 in opening the draw for the "Alice" to pass through. L. E. Wise was on the bridge with me.

It was near noon on the 4th of March, 1874, when she left Wyandotte. Wise and myself opened the draw while she was half a mile up the river. The main channel of the river was full of ice. The ice was floating in against the south or Kansas City side of the river all the way from the mouth of Kaw river down to the bridge. The river comes round in a bend towards Wyandotte until it reaches about 250 yards above the bridge, then it runs nearly straight in a easterly direction until it passes the bridge and gets down as far as the Gillis House. Immediately after leaving Wyandotte the "Alice" passed over to the north side of the floating ice and came down on the north side of the floating ice until she was within about three lengths of the boat from the upper draw rest of the bridge, when she turned her bow in a southeasterly direction and attempted to run into the floating ice and pass through the south side of the draw. She then flanked against the upper draw rest of the bridge, striking the upper draw rest just forward of her left wheel-house. The south side of the draw was running full of ice when she attempted to turn through it. There was some ice passing through the north
302 side of the draw, but not much. When she turned her bow in a southeasterly direction to pass through the south side of the draw she was headed as if she intended to pass through the north side of the draw. I helped to sound the water on several occasions prior to the accident to the "Alice," and it was deeper on the north side of the draw. It ranged from 20 feet deep at pier No. 1 to pier No. 3, where it was about 38 feet deep at an ordinary stage

of water. At the time of the accident the river was a little above an ordinary stage of water.

There was a sand bar on the north side of the river which was about 500 feet north of the upper draw rest. There was nothing to prevent a boat from running through the north side of the draw with safety.

The usual course for boats coming down the river was to hug the Kansas City shore until they passed the bridge. I mean the south side of the draw. There was a point of rocks about two hundred and fifty yards above the bridge. When the boats passed this point of rocks they headed their bows for pier No. 1 and kept as close to the pontoons on the south side of the south draw as they could. The current was all the time flanking them towards the upper draw rest and the pivot pier. At the time I was engineer on the bridge there was no accident to any boat passing through the bridge, except to the Alice, on the 4th of March, 1874, and the St. Luke, about
303 the middle of September following.

There was about 150 boats passed through in a season. The Alice was about 100 feet further north or out into the river than boats generally were which passed through the south side of the draw. I never saw a boat pass through the south side of the draw that was as far out into the river as the Alice was at the time she attempted to run into the floating ice west of the upper draw rest of the bridge, as I have described heretofore. The Alice was the first boat up that season; she passed up the night before. There was very little ice floating when she passed up, but it broke loose above Wyandotte before morning and was running heavily when she left Wyandotte, filling the south side of the draw.

The cakes ranged from small cakes up to 8 or 10 or 12 ft. square and 8 or 10 inches thick. It is what was call old Missouri river ice. I mean by this that it was ice that had formed during the winter.

Two or three days before the accident to the "Alice" the ice, as far up as Wyandotte and for some distance above, broke up, and in coming down forced the pontoons or barges out of their usual positions, turning them up sideways, the north side of them being down; the cause of it was the ice getting in between them and the Kansas City shore, but they still remained fastened together.
304 There was about half of them under water and the other half of them above water. These pontoons or barges were five in number at the time of the accident; would average about 55 ft. long and 5½ ft. deep and 18 to 20 ft. wide; they were fastened together by means of a wire cable as close as they could be, and were fastened to pier No. 1—that is, the lowermost one was, and the uppermost one was fastened to a rock. The rock was about 330 or 340 ft. above pier No. 1, on the side of the bank on the Kansas City side of the river. They were nearly parallel with the drawbridge when it was open. At the upper end it was a little further from the drawbridge when open than it was at the lower end. I drilled the hole in the rock with my own hand in which the ring was fastened to which the pontoons were fastened.

There were originally six pontoons, but about a year before the

accident to the "Alice" the lowermost pontoon was shoved out of position by the ice when it broke up in the spring, and we were not able to get it back into its original position, so we loosened it from the other pontoons and shoved it upon the bank 75 to 100 feet from pier No. 1, and from 60 to 70 feet above low-water mark. This pontoon was cut up by the people during the following summer and taken away.

305 By direction of Mr. Wise, the sup't of the bridge, about the middle of April, 1874, I commenced stripping the deck of these barges and taking the lumber home, and kept on at it until the middle of May, when I had stripped them all I could. What I mean was stripping them of that portion of the pontoons or barges which was above water; and before the June rise we got a locomotive on the Missouri Pacific track and pulled out the remainder portion of these lower remaining barges and -loated them down the river below the bridge; the other two were only partially torn out and floated down the river. The bottom was buried in the sand, so that we could not get it out and we could not get the side next to the pivot pier & draw rest out. This was all done before the June rise, in 1874. There was no cross-current made by the pontoons when they sunk or at any time after they were sunk, and after we pulled out the pontoons, as I have described, there was nothing there to make any cross-current. There was no more cross-current there after these pontoons were sunk than there was before they sank. There was a current made by the rocky shore and bend in the river, about 250 yards above the bridge; this current was there when the bridge was built and continued from that time up to the time of the accident to the Alice and also the accident to the St. Luke.

306 I rowed up in a skiff frequently from pier No. 1 up around the bend, and when we struck this current it would flank the skiff out into the current above the upper draw rest. We had to row hard to prevent the skiff from being drifted down against the upper draw rest, and in coming down the river this current would shove you out the same way. If we were fifty feet from the Kansas City shore and the skiff allowed to drift it would drift us down against the pivot pier, and if we were a little further out, say from 20 to 40 feet, or maybe 50 feet, and the skiff was allowed to drift, it would drift us down against the upper rest. The Missouri river has a very strong current, and it is particularly strong at the foot of the bend above the bridge, and in passing through the south side of the draw it is necessary to hug the Kansas City shore closely, commencing at least a quarter of a mile above the bridge, in order to pass through with safety.

his
JERRY x FOUNTAIN.
mark.

Gilday.

The defendant next read in evidence the deposition of P. S. GILDAY, which is in words and figures following:

1st question. State your residence and occupation.

Ans. I live in Curtan Ward; am conductor on construction train on C., B. & Q. R. R.

307 Q. Where did you reside & what was your occupation in March, 1874?

A. I lived in Kansas City, Mo; was working at the carpenter's trade.

3. Did you witness the accident to the steamer Alice at the Kansas City bridge on the 4th of March, 1874? If so, state where you were at the time of the accident and what the circumstances were, so far as you observed them, attending it.

A. 3. I was at the draw at the time, standing on the south pier. I seen her coming down the river. She was on the north side of the ice, coming down. When she was -in some 30 or 40 rods of the rest she turned into the channel to come through south of the draw, and she struck the nose of the draw about the wheel-house and tore it off. The ice covered the channel of the river from the south shore to the draw rest.

4. Was the ice running heavy or thin?

A. It was running heavy.

5. At what stage was the water in the river at that time, & what was its current per hour?

A. I couldn't say how high the water was at that time; it was on the rise at the time; its velocity was about 8 miles per hour.

6. What is the distance between the centre pier and the south pier, to which the water runs?

A. About 160 feet.

308 7. Had the boat come down in the centre of the channel, amid the ice, from Wyandotte, would there have been any danger of her striking the centre pier?

A. I think not.

8. When the boat entered the pier was it bow forward or stern foremost?

A. It was bow foremost.

9. At what rate of speed do you judge she was running when she was -truck?

A. To the best of my judgment, she was floating until she went to go through the draw.

10. State, if you know, if the Alice was the first boat that passed through the piers of the bridge that season.

A. I do not.

11. After this trip of the Alice in the spring of 1874 were there other boats passing up & down the river that spring; &, if so, how many per week?

A. There were other boats passed up & down, but I couldn't say how many.

12. Did any other boat meat with an accident at the bridge, save & except the Alice, that spring.

A. None that I know of.

Cross-examined by Mr. LADD:

No. 1. Where do you say you were standing?

A. I was standing on the south pier, No. 1; it being the south pier that the draw rests on when closed.

2. What were you doing there?

A. I just came down from town to the end of the bridge;
309 then walked from the toll-house to the pier to see the boat pass through.

3. Was there any one there with you?

A. There were several; but I don't recollect any but James Rolf, who, I believe, was working on the bridge.

4. Was you working at your trade?

A. I was at work at my own place at my trade.

5. Did you ever work on that bridge?

A. Yes; before & after the accident; I commenced with the bridge & worked all the time until comp-ted.

6. Do — remember when the bridge was completed?

A. I do not; but I think it was in 1869.

7. How much did you work on the bridge after the accident?

A. I worked in the fall of 1874 & the spring of 1875.

8. When did you leave Kansas City?

A. The 3d of April, 1875; I left Kansas City in the spring of 1875, & have been at work on the C., B. & Q. R. R. ever since.

9. Had you ever worked on the railroad before coming to Custer?

Ans. Yes; I have worked for several roads, but not engaged in running trains, but building bridges.

10. Was you acquainted with any of the officers of the B. & M. R. R. before coming here?

A. Several of them.

11. Have you ever been engaged in running steamboats in the river?

310 A. No; I never was engaged in any capacity on the steamboats.

12. What time of day did this accident occur?

A. About noon, or a little before.

13. How far from the bridge was the boat when you first seen her?

A. She was 30 or 40 rods above the head of the upper rest.

14. How far out into the stream did the ice extend?

A. From the south shore to the nose of the rest.

15. How far is that?

A. About 160 feet.

16. How far out into the stream did the ice extend at the point where you first saw the boat?

A. About the same distance it did at the nose of the rest; that was floating ice.

17. You say that ice was heavy; how heavy was it?

A. It covered the face of the water about 160 feet; thickness, I couldn't say.

18. Then you don't know whether it was heavy or not?

A. I couldn't say; but it covered the face of the water; I don't know whether it was heavy or not.

19. Now, when you first saw that boat she was floating, was she? Do you mean that she had no steam on?

A. I mean by that that she wasn't working her wheels when I first saw her.

20. How long before she commenced to work her wheels?

311 A. She floated down near to the nose of the rest before she commenced to work her wheels. She was some 30 or 40 rods above the head of the rest before she throwed her bow to the south, & then she commenced to work her wheels.

21. When you say near the nose of the rest you mean 30 or 40 rods from it?

A. I do.

22. Well, what was the effect when she turned her bow into the ice?

A. The stern swung around towards the nose of the rest.

23. The stern never got into the ice, then?

A. Yes.

24. After the boat turned into the ice did she get into a course parallel with the channel?

A. She did not.

25. After she turned into the ice the boat turned sideways, did she?

A. Yes.

26. Boat have on a good head of steam when she struck the rest?

A. I cannot say; but I noticed her working her wheels from the time she first came into the ice.

27. The ice filled the entire channel?

A. I can't say. There may have been some channel on the north side of the rest. The ice filled it from the rest to the shore. The ice at the point where I first saw the boat extended out about the same distance from the shore as it did at the bridge.

28. You worked as a carpenter on the bridge, did you?

A. I did.

312 29. Did you do any work or see any work done on some flatboats lying there?

A. I worked on them some. I had the charge of a gang of men that worked on them.

30. Who had the general supervisory charge and directing — the work on the bridge & those pontoon-?

A. Mr. Chanute.

31. Did you see anybody on the deck of the boat at the time of the accident?

A. Yes; I seen some on the deck & on the top.

32. In your opinion would the judgment of a pilot of long experience in running bridges on the Missouri river as to the proper way to manage a boat as to the cause of an accident happening to it be more or less valuable than your own?

A. His judgment should be better than mine.

33. When were these pontoons placed near the bridge, extending from the south pier up the river?

A. I think it was in September, 1869.

34. You don't know, then, that the Alice came steaming down towards the bridge as fast as she could?

A. I do not.

35. How fast do you think the boat was going when she struck the bridge?

A. I think 10 or 12 miles an hour.

36. How — had she been going at that rate of speed?

A. I think she had been gaining speed from the time she turned in until she struck.

37. What prevented her from getting into the ice?

A. I don't know.

38. Do you think that the ice was heavy enough to prevent
313 the boat running into it when under a full head of steam?

A. I think it was heavy enough to keep the boat from geting into the ice in the distance she had to come before she came to the head of the rest.

39. Did you ever see a boat of that size try it before or since?

A. I never did.

40. Would the judgment of a skillful pilot on that subject be better than your own?

A. I think it ought to be.

41. Do you pretend to say that the ice alone prevented that boat from getting into the main channel?

A. I do not.

42. Don't you think the current sweeping from the shore towards the draw rest had something to do with it?

A. It may have had; I couldn't say as to that.

43. It is a fact, is it not, that there was a strong current from the south shore above the bridge tending towards the draw rest or pivot pier?

A. Don't know that there was any more than at any other time; the ice ran between the nose of the pier & the shore.

44. Is it not a fact that there was at that time a tendency in the current of the water from the shore, at a point just above the bridge, over towards the pivot pier?

A. I believe that there was such a tendency.

45. How many of these pontoons were there, and what was the length of each?

A. I believe there were seven of them; they were from 100
314 to 120 feet long each; they extended in a line from the south pier up the river to the south shore, and were fastened at the upper end to the south shore; they were intended to float on the water.

46. When put in were they also fastened at the lower end to the shore pier?

A. They were.

47. Who first spoke to you about being a witness in this case & when?

A. Mr. Wise, superintendent of the bridge, spoke to me several times & said that we would get to go to St. Louis to attend the trial; it was during the year of the accident that he told me.

F. S. GILDEY.

Fred. Dosier.

The defendant next read in evidence the deposition of FRED. DOSIER, which was in words and figures as follows, to wit:

By Mr. CARR:

1. Captain, state your name.
Ans. Fred. Dosier.
Q. What is your residence?
A. St. Louis.
Q. Age?
Ans. 39.
Q. Occupation?
Ans. I was pilot and also commander of steamboats.
Q. For how many years?
A. About 20 years.
Q. State if you ever steamboated on the Missouri river; and, if so, how long and what part of the river.
315 Ans. I have steamboated on the Missouri river ever since I commenced, about 1854, and ran up to 1868 regularly.
Q. And not since then?
Ans. No; not much of any consequence since 1868.
Q. Have you steamboated some?
A. Some since then in the lower part of the Missouri river.
Q. State what parts of the river you have steamboated on.
A. Well, up to 1868 from St. Louis to Fort Benton; from St. Louis to various points—Omaha, St. Louis, St Joe, & St. Louis, Leavenworth, and St. Louis.
Q. Do you know where the railroad bridge crosses the Mo. river at Kansas City is located?
A. Yes, sir.
Q. Will you state if you have run through the draw at said bridge since the bridge has been built?
A. Not since the superstructure has been put on—that is, the wood-work. I went through the piers, while piers were in the river, I think, the year before the wood-work was put on; about the year previous to that—to the completion of the bridge.
Q. Do you know the time that work was commenced on the piers?
A. No, sir, I don't; but I have steamboated there when they were building the piers in the river, but I don't remember what years.
Q. This is intended to represent a drawing of the bridge drawn by Mr. Chanute, the chief engineer (handing diagram to
316 witness). Do you recollect of noticing the place after the pontoons were placed in position, commencing at pier No. 1?
A. No, sir; I never saw any pontoons there. I saw pontoons right here (indicating)—that is, boats that were fastened on this middle pier while they were building, but didn't see any out against the bank there (indicating).
Q. Was pier No. 1, pivot pier, and No. 3 above water?
A. Yes, sir; they were above. We had noticed these piers in

going up & down, but there was no draw at that time when I was there.

Q. State on which side of the river the channel is, commencing at Wyandotte, say.

—. It is down the east bank of the river, what we call the south bank of the river, and following the south shore all along from Wyandotte—follow it close all the way around; I always run between the pivot pier and the shore pier on the Kansas City side.

Q. You take the south draw?

A. Yes, sir.

Q. Now, will you state what is the direction of the river commencing at Wyandotte and coming down past the mouth of the Kaw down to where the bridge is located—the shape of it I mean?

A. It is considerable of a curve bend all the way around the bottom; below the mouth of the Kaw is washed in considerable—
317 that is, betow Wyandotte; and the mouth of the Kaw the main shore is washed away and left considerable of a bend there.

Q. Now, state what kind of a shore it is commencing at the bridge or the Gillis House, if you please, & extending up the river towards the mouth of the Kaw.

A. How far from the Gillis House? It is possibly half a mile. It is a rock shore; maybe not a quarter of a mile. It is a formation of rock, natural formation of stone, and above that it is bottom land (examining map). The bend here is considerable, even below Wyandotte; not so much below the Kaw, but below Wyandotte. It has straightened off some below the mouth of the Kaw, but from Wyandotte it is a complete curve around till you come to the rocky shore above Kansas City.

Q. Above the bridge?

A. Yes, sir; above the bridge.

Q. About how far above the bridge does that curve or bend in the river cease—I mean the bend up here (indicating); how far above does it cease until it kind of turns straight?

A. How far above the bridge does the movement commence?

Q. Yes. That is, how far above does the bend commence?

A. Well, above the bridge it is not a great ways; I suppose
318 200 yards—200 or 300; maybe 300 yards above the bridge.

[Q. You say a straight decline to the south, then the bend begins to make itself straight; there is a point there, isn't there?

(Objected to.)

Mr. CARR: What kind of a point is there, if there is any?

(Objected to as leading.)

A. It is a short, rocky point.

Q. Now, state if that rocky point has any effect upon the channel; and, if so, state what effect it has.

Q. Yes, sir; it had a tendency to throw our boat out into the river; it could have the tendency to run us out into the stream—out from the shore—from the Kansas City shore.

Q. Well, how far now would that throw the current out from this rocky point?

A. O, well, it is hard to tell; that would be guess-work. I couldn't say, but it has a tendency to leave the Kansas City shore and has a tendency to deflect towards the middle of the stream now; not entirely across, but to some distance out.

Q. It would deflect so as to form a right angle, would it?

(Objected to as leading.)

A. O, no, sir.

Q. State about how great a deflection it would form in the current from the shore.

A. Well, that is how far from the shore would it pass the current out?

Q. How great an angle would it form?

319 A. Well, possibly 150 feet from the shore it would throw the current out; it would have the tendency to deflect it that much.

Q. And what distance down from the point; could it be about 150 feet out from the shore; in other words, how far would the water form again—converge down as well as out?

A. I couldn't tell you in regard to that; it is a matter of judgment; possibly 50 yards—100 yard-; 50 or sixty yards; something like that.]*

Q. Suppose there was a line of pontoons, say six in number, about 50 to 60 feet long, 20 feet wide and 55 feet deep, were placed in line fastened to pier No. 1 in the bridge there and extending up to that rocky shore—fastened—and say three of them were to sink in the river in the position in which they were placed, could that create a cross-current so as to throw a current over against the draw rest of the bridge, assuming that it is 160 feet of the river from the pivot pier?

(Objected to as leading.)

By Mr. CARR: In the channel, I mean.

Question read by the reporter.

A. I think it might create some little cross-current, but not very material in that case.

Q. Suppose the water commencing at the uppermost or western-most pontoon—commencing at nothing and shelving down until the water began to be 19 feet deep at the pier No. 1, could

320 the pontoons, sinking in water of that depth, create a cross-current?

(Objected to as leading.)

A. I think they could create some cross-current.

Q. State which end of the line the cross-current would be, the upper or lower end; the lower one is number one.

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* Words in brackets refused.

A. It would be possible a cross-current from here (indicating) to some extent, but not very materially.

Q. Would it create a cross-current enough to force a steamboat coming down, properly handled by the pilot, sufficiently to turn it out of its course there and force it over against that draw rest?

(Objected to as leading.)

A. I think not.

Q. What would be the effect of the natural current formed by the rocky shore formation on a boat going down?

A. It would have a tendency to force a boat out into the stream—mid current—mid river, you might say.

Q. What would be the proper way to bring a boat down through that; which part of the draw would be the proper part for it to go through?

A. The draw I have always run is between pier No. 1 and pivot pier.

Q. What I mean is, what side of the draw is the proper one, in coming down stream, for a boat to take?

321 [A. I consider the proper side, just as I told you, is near the Kansas City pier—running between the Kansas City pier and the middle pier, the piers that I have always passed through; it is difficult to pass through in any other on account of this point above.

Q. Why is it difficult?

A. Because all the current sets out there from this point; from this rocky point it set out on this middle pier, and the difficulty is to keep off the middle pier; there is no danger of striking the shore pier to keep off the pier; the current has a tendency to carry us out in on the pivot pier; I call it the middle one; it is the outside pier, in other words.

Q. How would it operate in regard to the draw rest extending up from it?

A. That I don't know; that wasn't there.

Q. Suppose it were there?

A. That would still be, of course, just as much in the way as anything else; it would have to be avoided.

Q. Well, state if it is on this current forward by the bend in the river there; has it any tendency to flank about?

A. Yes, sir; it flanks onto this point (indicating), in coming down & coming out of the bend; she flanks upon the Kansas City point. In all such cases we have to stop & back in order to get through;

322 reverse our engines in order to keep off the pivot pier or the draw rest, if there was one there; the current shoots us out from this point of rocks in the direction of that.

Int. Is that the natural effect it would have on a boat?]*

A. It did when I was there; yes, sir.

Int. Well, was there any difficulty with a careful pilot attending

* Words in brackets excluded because directly contradicting averment of answer.

to his business properly and running the boat through that draw at the time that you passed through there?

A. In ordinary weather & good water it was not. I passed through myself with several boats & I never had any difficulty or trouble. I expect I had to be careful & my pilots had to be careful in passing through.

Int. Well, I will get you to state a little more fully in regard to the manner of hugging the shore coming down there—the Kansas City shore?

Int. We have to keep very close to the bend above the rocks; it is not so material about keeping close inside, but before we get down to the rocky point above the bridge we have got to get very close indeed to the shore in order to keep off the outside pier, as we call it.

Int. Which we call the pivot pier?

A. In coming down we are very close to the rock on the Kansas City shore and often have to bank here to keep from getting to- far out into this pier, because the water had a tendency to set
323 us out upon this outside pier, out into the stream from the Kansas City side.

Int. Well, how near down to the shore pier here (indicating) could you get a boat & stop her and bank her?

A. Well, when you bank her you land her, & when you back her you reverse the engine. You can run a steamboat down in ordinary water, stage water, almost as close as you please and back off out if anything, back off up stream unless they were very deeply laden and the river very high; or if they were encumbered with barges they might not be able to back her, as we call it; but ordinarily a boat could get in there & back herself out of it if she is not too heavily laden.

Int. Suppose that the water is at an ordinary stage and a boat was attempting to run through the south draw of the bridge, how near to the bridge could she stop and back out so as to prevent landing against the pier?

A. I would consider it unsafe to go very near to a bridge of that kind with a loaded boat & attempt to back out of it.

Int. How near could you get to it with a loaded boat?

A. Possibly 100 yards would be near enough to get, if you could, to manage your boat to get up out of it without meeting with accident—that is, provided you saw you were running & could not hug the shore.

Int. Suppose you saw she was flanking over against the
324 draw rest, what distance in the channel, such as it is in ordinary channel of water, could you stop her so as to prevent striking the draw rest?

A. It depends upon the stage of water and the condition.

Q. I am assuming now an ordinary stage.

A. Well, I should think 100 yards or 150 yards, something like that, a man should be able to manage his boat so he couldn't miss it.

Q. If he saw his boat was flanking?

A. Yes, sir; I think in 100 or 150 yards he could avoid the danger.

Q. Suppose the river—the channel—was pretty well filled with ice, so as to fill up the south side of the draw pretty well, & the pilot were to attempt to run his boat through the ice, how far above there should he get into the Kansas City side or into the middle of the channel so as to go through with safety?

A. He should keep as close to the Kansas City side as possible; in that case, I should think as near as possible, when he intended to run the Kansas City pier, that is the other side of the draw, & let her drift with the ice.

Q. Would it be prudent to go down on the outside of the floating ice—that is, the north side—in other words, the Clay county side?

A. No, sir.

Q. Until, say, within 300 yards of the draw rest, & then attempt to run his boat in there and go through the south draw?

325 A. I couldn't answer that without I should see it; it is difficult to decide a point of that kind without being an eye-witness.

Q. Well, I am asking your opinion.

A. I would think that I was in a very bad position, coming down on the outside to endeavor to get inside—that is, run the inside draw.

Q. Well, what kind of seamanship, if that is a proper term to use, would you consider that, sir, for a pilot to pass through under such circumstances?

A. Well, all men don't look alike in piloting. I might call it good & he might call it bad. The man who was at the wheel might be a very fine pilot & yet his judgment might fail.

Q. I want your judgment now whether it is good seamanship or bad seamanship, under this supposed state of facts of which I have stated?

A. I don't known how to answer that question. I couldn't judge. A man in this circumstance might be doing the best he could.

Q. How many yards, then, above the draw rest would be safe, prudent piloting or seamanship under such circumstances?—I mean assuming that the channel here on the south side of the draw is full of ice, floating ice, such as they have at the breaking up of the river in the spring.

Q. Well, in navigating a stream when the river is full of ice it is very difficult to back up at all times. The ice interferes
326 very materially with that part of the business. A steamer would require more time in the ice than she would with a river that was free of ice.

Q. State the distance that you would consider prudent & safe in the ice now under such circumstances as I have stated, assuming that the channel here was full or nearly full of floating ice at the breaking up of the river in the spring, and a boat were coming down on the south side of the floating ice until it got within a short distance of the draw rest and then was to attempt to shoot it—go into the draw. What distance above the draw rest would be a safe

distance to come in under the ice and turn the boat; in other words, into the ice?

A. I think 150 yards would be safe enough.

[Q. Well, now, assuming that there is a cross-current created by the natural formation of the shore there, would it be safe to shoot a boat in anywhere below that cross-current or under the cross-current or below it?

A. Well, I would consider it very safe to put your boat in the south side under the cross-current. It would be hazardous in that case.]*

[Q. How far, then, above cross-current formed by the formation of the shore would it be prudent to start your boat into the floating ice so as to go down with safety—to go down through?

A. At any point above the rocky point would do better
327 than below the point. Any place above this rocky point (indicating) or the pontoons where a boat could be straightened and go straight into the current and not crosswise.]*

Q. What distance would the boat have run before she could be got straight, or in what distance could she be straightened?

A. It depends upon the quantity of ice in the river & the condition the boat was in and the load she had on board. Ordinarily you can straighten a boat in floating down the river, say, in a hundred yards, if she is crosswise.

Q. Suppose a boat is over 200 feet long herself, that would be over 66 yards—over two-thirds of the distance—what length of the boat would it take to straighten her?

A. Well, possibly two lengths of the boat; sometimes sooner than that. It depends upon the condition of the river & how the boat is making steam, & all that. Sometimes a boat has green wood & don't handle herself properly.

Q. Well, if the ice were floating, as I have already stated, how far—what distance—would a boat have to run before she could straighten herself?

A. I would say at least a hundred yards before she could get herself straight in the river, if she was crosswise.

Q. If in floating ice?

A. Floating down 100 yards, yes, sir, before she could get herself straight.

328 Q. Would the floating ice have any effect in striking the boat in preventing her from straightening?

A. Yes, sir; it has an effect.

Q. Well, state what that effect would be.

A. Well, it encumbers the wheels, & it also catches the bow & stern. As it swings natural-y you have got to move the ice out of the way from one point to another. It has got to crowd the ice up from one place to another in order to make room for the vessel to twist round in.

Q. Well, would it have any other effect?

A. That depends upon the kind of ice, whether it is thin ice or other

* Words in brackets excluded because contradicting answer.

ice. The heavier the ice the more power it would take to straighten the boat around. In slush or soft ice it is not material, but in the heavy ice it is very troublesome.

Q. State the effect now on the wheels in revolving that ice, that the ice, would have.

A. Well it would—it impedes the wheels & the motion of the engines considerable, probably half. It won't do as much execution by double in the ice if the wheels are impeded by the ice.

Q. Well, then, would it have any effect of flanking a boat sideways?

A. Yes, the ice would. Yes, sir; it would.

Q. Well, state what effect it would have.

A. The boat is unmanageable to some extent in the ice. When it is heavy it is difficult to manage a boat as you would like to in heavy floating ice, especially if she is crosswise?

329 Q. Does the pilot have the same control, in floating ice, over his boat that he would have in an open river?

A. No, sir.

Q. Does the wind have any effect on a boat?

A. Yes, sir.

Q. Will — state what effect the wind has?

A. Well, it makes a vessel unwieldy; so much so that the wind gets so high that boats can't navigate at all, either up or down; the rudder and engine have no control over the vessel whatever in very high wind.

Q. What is the general direction of the shore from the rocky point of which you have spoken?

A. That is, you mean the points of the compass?

COUNSEL: Yes; the points of the compass, the curve of the river at Kansas City, commencing where the rocky point commences and towards the mouth of the Kaw river—commencing, I mean, at the curve form the draw?

A. It runs almost south there; southwest a little; southwest to Kaw river.

Q. And from that point coming down the river, I mean.

A. Coming down it would run then northeast, I think.

Q. How is it, with reference to straightness, or crookedness from the rocky point down until you pass the Gillis House; what distance does that rocky shore extend down, I mean?

A. Well, it forms a levee there at Kansas City; all rocky, solid rock.

330 Q. Where is the levee, with reference to the bridge?

A. Below the bridge.

Q. How far below?

A. Well, not a great ways—a short distance.

Cross-examined by Mr. LADD:

Cross-int. Capt., I believe you said you were through there several times while the piers were being constructed?

A. Yes, sir.

Q. But not after the superstructure was put on?

A. No, sir; not after the superstructure was put on.

Q. Were you through after the piers were fully up—all of them?

A. I think not, sir; I don't think they were quite completed—that is, the tops, the bases, were up.

Q. Do you remember how many times you went through after the pivot pier and pier No. 1 got above water?

A. No, sir; I can't tell you. I was there in several boats; one was the Sam Gaty and another the Isabella, and I don't know—I believe, I don't know—how many boats I went through there on.

Q. Five or six times?

A. O, yes; I think so, sir, probably; it has been a good long while ago.

Q. Well, do you say that you always went through the south side of the draw?

A. Yes, sir—that is, towards the Kansas City shore.

Q. That was the side that all the steamboats took?

331 A. I never saw a boat go through anywhere else; that was considered the channel; whether it was the safest there I don't know; we all run it as boatmen and didn't know any other way.

Q. You wouldn't have liked to have taken the risk of running on the other side?

A. We didn't attempt it and didn't think of going anywhere else except this pier, between the shore & this pivot.

Q. Well, of course, you never saw the pontoons?

A. No, sir; not on the shore; I saw the boats among the piers there.

Q. You saw the boats which were afterwards used for pontoons?

A. Yes, sir; I presume they were; they were carrying stone.

Q. But never saw them extended from pier No. 1 to the shore?

A. No, sir.

Q. You don't know by practical experience or observation what assistance they were to boats going down?

A. No, sir; I couldn't tell you.

Q. You don't know from observation or experience what effect the sinking of the pontoons had on the current, do you, there?

A. Not those; no, I couldn't.

Q. You never saw, then, what the effects were?

A. I don't know what the effects would be, except from my knowledge of the effect they would naturally have. I don't know what effect these pontoons actually had; I never saw the effect of the current there personally.

332 Q. Now, the rocky shore commences about three or four hundred yards above the bridge you stated, I believe?

A. Yes, sir; that is a natural rocky shore; it is a rocky shore all the way round the rocky point; is three or four hundred yards above the bridge.

Q. It is not natural rock shore all the way up to the Kaw river?

A. No, sir.

Q. Do you know that the alluvial bottom there on the south side of the river, between the bridge & the Kaw river, has been riprapped?

A. Yes, sir; it was at that time; there was some dykes there.

Q. You haven't been up there since that was riprapped all the way up so as to keep the water in bounds?

A. No, sir.

Q. You say they had done some?

A. There was some piers built up & some little riprapping, probably 200 yards, but not the entire length of the bend.

Q. How far above the bridge does the natural rocky shore begin?

A. Well, it is rock; the rock is natural all along there, because we land against the rock; there has been some filling thrown in there from the hills.

Q. But how far is it above the bridge before you strike; before you used to strike the bottom that washed away?

A. When I was there I presume it was two or three hundred yards above the bridge; there was a bluff there, but then there
333 was a bottom there, but what effect the river has had upon that since, I don't know.

Q. You think it was about 300 yards above the bridge?

A. That is my recollection. That is where the rocky shore comes right down to the river to the point of rocks. That comes out into the river above the bridge two or three hundred yards, I presume.

Q. From that part above how was it—alluvial soil?

A. I think that is where it commences. This bottom, as near as I can recollect. That is my recollection of it.

Q. Well, this place where the rocks begin—there was the termination of the bank, wasn't it?

A. Yes, sir; the foot of the bank—the place where the rock began.

Q. And that is where you locate this point?

A. Yes, sir; yes, sir.

Q. Now, you stated in your direct examination that at the place began a slight decline to the south; is that correct?

A. The bend—yes, sir; right at this point (indicating) it commences to jut out a little south of this bend.

Q. Is that an abrupt bend or a slight?

A. No, sir; it is a gradual bend.

Q. It runs around the rocks, then, does it, gradually towards the south looking up the river?

A. Yes, sir; southeast you may say.

Q. Well, you say at the foot of the bend or at the point, as you call it, there was a tendency in the current to deflect towards the north?

A. Yes, sir; there was when I was there.

334 Q. And you say that you noticed that you could see the effect of that deflection 50 or 60 yards down below the point; is that right?

A. Yes, sir; I believe that is correct.

Q. And below that you wouldn't notice it so much?

A. No, sir; not so much.

Q. Well, Capt., there is an eddy water there (indicating), where steamboats land at the landing—Kansas City? Below the bridge I mean.

A. We never landed up above the bridge, because our landing was down there, I presume, but this rocky point is the cause of the eddy. There was an eddy all the way along under this rocky point down to the landing near the Gillis House; not one of those terrible ones, but what we call an eddy.

Q. Now, you say that the deflection which was caused at the termination of the bend you would notice in the river for 50 or 60 yards below you state, I believe?

A. I believe, so; yes, sir.

Q. And after that would the water recover itself and run straight along down here (Indicating)?

A. Well, it might do so and wear across to the other shore; it might distribute itself.

Q. Would the natural channel come down through the pivot pier and pier No. 1, so that it was safe for boats to run through?

A. Well, it wasn't always safe. The channel had a tendency to go out always towards this middle pier. The channel had a
335 tendency to go out that way—deflect that way all the time—and in steamboating we had to endeavor to miss the pivot pier, and the shore pier or the south pier we didn't fear at all. It was the middle pivot pier that gave us the trouble.

Q. In coming down you would head your boat for pier No. 1?

A. Yes, sir; we would back into the Kansas City shore. There was two or three ways to pilot through a bridge or snags. Some pilots do it one way & some another; it depends upon the condition of the river, sir.

Q. When would a boat coming down begin to feel the effect of this deflection that you have spoken of?

A. Not until you——

Q. How many yards below the termination of the bend?

A. Just as soon as you pass the point and get into this current that strikes the boat, then you would feel it.

Q. How many yards?

A. In 50 yards; because it was a slight current. Before 50 yards you couldn't feel it.

Q. You would notice the deflection, then, caused by the termination of the bend within 50 yards after you had passed?

A. Yes, sir; you would discover that your boat was drifting off into the middle.

Q. That is the only current that you ever knew anything about that tended over towards the Kansas City shore?

A. Yes, sir; all I ever knew.

336 Q. You don't know anything about a current that stretch-out from the shore a hundred yards above the bridge, do you?

A. No, sir; I think not.

Q. You never saw such a current as that?

A. No, sir.

Q. You never saw a current striking out from the shore a hundred yards below the terminationof that bend, did you; right out towards the north shore?

A. No, sir.

Q. You don't know anything about any such current as that?

A. No, sir.

Q. If there is any such a current as that it has formed since you were there?

A. Yes, sir; since I was there.

Q. These pontoons were, I think, about 60 feet long, 20 feet wide, & 5 feet deep. Wouldn't the stage of water—wouldn't the effect of sinking the pontoons in the channel on the current of the river be effected to a certain extent by the stage of water?

A. Yes, sir.

Q. It would be greater at some times & less at other times?

A. In very high water it wouldn't — it so much, because they would be covered up; in very low water it might have some effect.

Q. Suppose a boat pontoon 60 feet long, 20 feet wide, and 5 feet deep, built of heavy timbers and lumber, covered over, was to sink from the shore transversely to the current?

337 A. That would have some effect in changing the current. If it stayed there long enough it wouldn't have much effect in deep water, but in shallow water it would have some effect.

Q. What would the effect be—to turn the current away from it?

A. Yes, sir.

Q. Toward the north?

A. It would have some tendency to turn it away and form eddys.

Q. Captain, suppose a boat 200 feet long was coming down the river & had got within—her head had got within—100 feet of the superstructure of the bridge, her stern then begins to flank over towards the north suddenly; do you think a man could back his boat out of there & get it out safely?

A. No, sir; not ordinarily; not in a 100 feet.

Q. Could it be done? You stated before that if the pilot saw his boat flanking he could avoid the danger in 150 or 200 yards; do you suppose he could do it in 200 feet?

A. It depends on the stage of the water and the amount of the freight he has in his boat & various other things; the steam he has on and all that. If the boat is heavily loaded or partially so, big river & small power, think he could not get out of it.

Q. She would have to go on?

A. But then boats can back out of it possibly; if she was not loaded too deep & with good steam.

Q. Captain, suppose a boat 220 feet long were coming down
338 the river on a line extending out from the head of the draw rest, pointed right towards the draw rest, some steam on, coming in that direction, until she got within 300 feet of the draw rest, don't you think that a pilot who undertook to turn his boat at that point so as to run into the south draw would run right on the draw rest?

A. He would be very apt.

Q. A man would be a fool, wouldn't he, to try to do so?

A. In that case I think he ought to back his boat; it is altogether

too close a point to undertake to back his boat in; it is rather close to go down sideways & try to make it.

Q. Suppose instead of being in a line directly west of the head of the draw rest he was over northwest of the draw rest & coming east until he got within on a line of 300 feet west of the draw rest & then undertook to turn around and come through the south draw, wouldn't he be sure to smash his boat?

A. If his boat wasn't loaded too deep and he could manage her with the wheels I think he could back her out of that.

Q. If he undertakes to go right across it?

A. Well, in that case——

Q. In three hundred yards?

A. He might miss that in 300 yards; yes, sir; & keep the steam on all the time.

Q. Suppose there was — in the river at the same time that he had to go into & put his head into before he got into the
339 draw, could he do it then in 300 feet?

A. 300 feet. I should have thought the boat could have cleared that pier in 300 feet—that is, if she wasn't crosswise.

Q. Suppose she comes straight down east headed for the draw rest until she gets within 300 feet, & he then undertakes to turn and run his boat through the draw rest, do you think there is room enough for a boat, a side wheel, to do it, going right ahead without attempting to back up there; don't you think it would be a very foolhardy piece of business?

A. I think it would be a difficult job; a very dangerous job, at least.

Q. You say at this point that you speak of where the rocky shore commences there is just a slight curve towards the south?

A. Yes, sir; that is the way I understand it.

Q. That is what you mean by the rocky point?

A. Yes, sir.

Redirect examination by JAMES CARR, Esq.:

Int. In your cross-examination you were asked if the pontoons were sunk transversely to the channel what effect they would have upon it?

A. I said in low water it would have some effect, but in high water and at that point it would have no effect or very little; that is my answer; that is what I think.

340 Q. Would the water flow over the pontoons if in deeper water?

A. Deep water & high water or either it would flow over it; you couldn't see any sign of it.

Q. Would it form a cross-current there?

A. Not in deep water or high water; no, sir.

Q. How deep water or how shallow would the water have to be before it can form any cross-current?

A. Six or 8 or 10 feet or something like that.

Q. Before it would form a cross-current?

A. Yes, sir.

Q. Well now, is it possible for the boats to sink transversely to the channel there?

A. Not unless they were torn loose from their moorings and carried off.

Q. Carried off how?

A. Torn loose from the bank and carried down the stream & sunk in that kind of shape, because they don't lay transversely; they lay on & parallel with the shore—the current and the shore.

Q. Could they sink? Suppose they were torn loose at the lower end and fastened at the upper end, could they sink transversely to the channel & stay there?

A. Yes, sir; boats sometimes could sink and lay crossways.

Q. Where there is a strong current could they do it?

A. Yes, sir; sometimes in strong current boats often lay across the current and most boats do, and then they are gone.

By Mr. LADD:

Q. Was there a good landing at Kansas City?

A. Yes, sir; there was.

341 Q. No sand bar formed there?

A. None whatever.

The defendant next read in evidence the deposition of Joseph D. Oldham, which is in words & figures as follows:

Oldham.

JOSEPH D. OLDHAM, of lawful age, being duly sworn & examined on the part of the defendant, deposeth & saith:

By Mr. CARR:

Q. State your name, age, residence, occupation.

A. My name is Joseph D. Ohlman; I am 44 years old; I live at No. 1321 Spring street, in this city, & my occupation is that of pilot.

Q. State how long you have been acting as a pilot and on what river or rivers.

A. I have been in Missouri since 1851; I think I was pilot in 1852.

Q. Well, state if that has been your occupation ever since.

A. Yes, sir; it has.

Q. On what river?

A. The Missouri river.

Q. All the time in the Missouri river?

A. Yes, sir; in the Missouri river.

Q. State, if you know, where the Kansas City bridge is located at Kansas City.

A. Yes, sir; of course I can't name the direct point—abreast what streets.

Q. That isn't material; just say if you know the bridge.

A. Yes, sir; I know the bridge; it is just above the Gillis House.

342 Q. Now, describe the shape in which the river runs from Wyandotte down past the bridge.

A. (Examining map attached to Engineer Chanute's deposition.) Well, from what I see, it is pretty much this same shape that you have got it here, although there is one thing that don't correspond; it is a little straighter—a little more of a bend in this direction (indicating).

Q. Well, the direction of the water, how is that; south or what—in what shape?

A. Well, when the river comes down here (indicating), the bight of this bend, then you can have it south or north, whichever you want; it is the south side of the river—of the draw rest—that I am speaking of and this point of rocks that is above here.

Q. State first, now, in regard to the kind of shore it is from the mouth of the Kaw river down to the bridge.

A. Why it is a riprapped shore now, but it is a dirt alluvial formation down to within—I suppose from 4 or 500 yards—down to the bi-te of the bend, as near as I can come to it.

Q. Now, describe the kind of shore it is from the bight of the bend down to the bridge & below the bridge a short distance. What kind of a formation is the shore there?

A. The shore is a rocky shore from below the bi-te to the bridge & below the bridge.

Q. Natural rocky formation?

A. A natural rocky formation; it is bed rock. I have seen

343 the river when it was low before this riprapping was put on. I can't tell exactly how far; I have seen when the river was low that the rocks went up two or 300 yards above our bridge, even before it had cut in so deep; above that there was a rocky bottom then. The bluffs, even when there was dirt on top, still underneath it had cut into the rocks; that is what leaves this point like that (indicating)—throws this water out.

Q. Now, that point of rocks which you have spoken of is what distance above the bridge? What is the distance, in your judgment?

A. Well, I suppose, above the bridge it is about—you say the flats is 300 & some odd feet long?

Q. 350 or '60.

A. I reckon it is near 200 yards; probably a little more. I can't say exactly.

Q. 200 yards or a little more?

A. Yes, sir; I can't exactly say now. It may be 300 yards; I can't tell. It looks to me that this rocky point is further than the length of the boats.

Q. The pontoons?

A. Yes, sir; the pontoons. When I say flat boats I mean pontoons; yes, sir.

Q. Now, state what effect that point of rocks has upon the current at that point.

A. Well, that point of rocks throws the current up towards this

rest, draw rest—what I call a pier—right here (indicating). It is about in that line; that head being cut down there that deed
344 just brings it in a line; all the water strikes in that bend there and just brings it in line with the draw rest.

Q. Now, state which side of the river the current is on, from the mouth of the Kaw river down, if you please—down to the bridge.

A. On the south bank.

Q. Well, what is the effect of water striking against a rocky point or any other given object, sharply; how does it effect the water in deflecting it?

A. Well, it throws—it doesn't make any difference whether it is the bottom or rocks, anything hard, you can see sometimes in the middle of the river where there ain't any rocks, you can see the water strike something hard—you want to know—you can't imagine what it is; but it will strike that point and it will scatter that water and throw it out in the direction that you wouldn't think it would go.

Q. It deflects it, then?

A. Yes, sir; that is the reason. If this (indicating) wasn't cut out so far it would go out in a straighter course, instead of towards that draw.

Q. Now, state what the effect of the current spoken of has upon boats descending the river down through the south draw.

A. Well, as I say about coming down and getting into this body of water, into this current here, which throws out from this
345 point, why it will draw you out into the direction of this draw rest and pier (indicating); but if you get inside of this & get down close to the shore, if you get past this point of rocks and get here, inside, then you wouldn't have no great trouble; of course, sometimes you miss calculation on that height, not thinking about this, that it makes a difference about this (here) being cut down so far.

Q. In order to pass the draw rest with safety, how close should you hug the Kansas City shore along there?

A. Well, if you get past—if you would hug it close enough to miss the rocks, you could make it with safety. I have come down myself right close to this place (here) that you are speaking of. I expected the water to draw me out a little way from them, but I got so close to them that there was no draw away from there, that I had to stop for fear of rubbing them too hard, and it wouldn't draw away; but if you got out a little further it would be the same as having an eddy down on shore; if you got your boat into this (here) current it will be hard to get her out; it would draw you — instead of out when you are right close to the shore.

Q. How close would you have to be to the pontoons or flats?

A. As close as you can—close enough not to get on them; ten or fifteen feet, something like that.

346 Q. Well, if you were within 10 or fifteen feet then of the pontoons or flats, is there any danger of the current throwing you over against the draw rest?

A. No, sir; not after you get that close and get down to where the pontoons were. It wouldn't draw you over, because you are

inside of the curl of this other water that reaches from that point of rocks there.

Q. When you get below the point of rocks is there some eddy water?

A. Yes; slack water if you get into that shore (here)—slack water, because this water shoots out from this point of rock—that is, where you come in under that (here) it forms a slack water, the water might be slack altogether, but it would be a little.

Q. This slack water extends then from below the points of rocks above the bridge to down below how far?

A. It reaches clear below the landing; there has always been slack water way down below the Gillis House even before there was any bridge there; there was always this rounding point which brings slack water against the Kansas City shore—against the landing.

Q. Do you recollect the line of pontoons that were put from pier No. 1 up to the shore?

A. Yes, sir; flat boats.

Q. Do you remember noticing that place since they have been sunk?

347 A. Yes; I noticed it. I have gone through there. I noticed they wasnt' there—not in view.

Q. Now, have you noticed any difference in the current since you have missed the flat boats and what it was whilst they were there?

A. Yes; I have noticed that the current from that place (indicating); that since those flat boats had been sunk there has been more of a bend up there.

Q. That is from that point of rocks?

A. Yes, sir; they would bring no current down (here), for the current—that is, out after you get into the body of water that reaches out from the point of rocks—that reaches out from the draw rest.

Q. Explain what makes the current different there, will you.

A. It is on account of this bi-te of the bend (here) being cut a little deeper than it was before the current, don't go through as straight; it don't run the current down along the shore like it done before; before this bight of the bend was cut out the current run more straighter down the Kansas City shore.

Q. Now, state if there is any cross-current where the pontoons were while they were in sight and the draw rest of the bridge since the pontoons have been missing.

A. Well, I don't know; there is more or less cross-current at this place; whether it is from those pontoons there or not I couldn't say; there is more or less cross-current there all the time.

348 Q. Well, what are those currents owing to; what produces them?

A. At this point—this point above this rocky point produces them.

Q. Is there any difference in the current down here where the pontoons were since they have been sunk or missing, and what they were whilst they were there?

A. Not that I discovered.

Q. Well, state if you ever passed through the draw since the pontoons have been missing?

A. Yes, sir; I passed through last spring.

Q. Have you passed through every year?

A. I came down last fall—no, not last fall—last fall a year ago, and the spring before.

Q. Have you passed through every year since they were built—every season—I mean if you passed through this draw every season since the pontoons were built?

A. No; there was one season that we didn't come down any further than Yankton; that was three years ago; but I passed through every other season from two to three times.

Q. And you didn't discover any difference in the cross-current in the draw there like what it was while the pontoons were there and since they have been missing?

A. No, sir; only from this bend being cut down further it has made a stronger cross-current—that is, where I noticed it, and that makes the difference in my judgment since that time. I have
349 come down myself and come right close to those pontoons, and we would run there close and cross right down through; generally when I go through any place like that I don't stop. I go through pretty fast, but I got my boat in such shape and got her inside of this current and then dropped right along down and she didn't draw out with the current.

Int. Can that draw be passed since those pontoons have been sunk or missing, with safety, by a pilot of good skill?

Mr. LADD: I object to that question.

A. I passed through there. I could pass through; I suppose, anybody else can; boats do go through; they don't all get hurt; that proves that, you know.

Int. Well, suppose a pilot discovered that he was too far out into the channel or cross-current, then to pass through with safety what distance above the draw rest could he stop his boat and back out?

A. He would have to discover that two or three hundred yards above that; if he didn't discover it in that time why it would put him—it would run his boat abreast of the cross-current and which would carry his boat over against the draw rest—that is, it is bound to take him over against the draw rest or the pier, because the current is so strong you couldn't get right down close to it and stop her—stop your boat & back her away from it—because it is a
350 little stronger there; the river is narrowed and the bridge has a pretty strong current.

Int. Suppose the ice was floating in the channel so as to virtually fill up the south side of the draw, and the pilot was to run his boat down on the north side of the floating ice until he got within a short distance of the draw rest, and was to attempt to pass through the south side of the draw, at what distance should he commence to turn his boat into the floating ice in order to pass through with safety?

A. If he was 500 yards he couldn't go through the draw, because that current would take him down, and the ice would be there, and his boat would be crosswise pretty near, his stern would be

bound where the head should be. If this ice was inside of her, on the south side of him, filling the south side of the draw tolerably, he would be coming crosswise and the current would hit him on the starboard side, but if he couldn't get into that shape he would have to stop & back his boat up straight, and back his boat into the south shore again, and go on so as he could go on straight, but even so he would go in crosswise.

Int. Well, in the case of floating ice which I have described, which would be the proper way for him to go down the current of the channel—which side?

A. That would be according to where the ice was. I have
351 a good many times, because I have seen a good deal of ice in the channel; I didn't run where the ice was; I could pick out another place; that ice would probably crowd away over somewhere else, when I could go down even if the north side was filled up with ice; then I would go through the south side; but if the south side was filled up and the north side wasn't I would take the north side.

Int. Which side of the floating ice should he have come down the river, in attempting to come down the river, to pass through the south side of the draw?

A. He should have come down on the inside—on this side (indicating)—on the south side of this ice if there was any opening there, and even if there wasn't I wouldn't attempt to go outside of this ice and try to work crosswise through the bridge, through the south side of the draw; I should have kept on on the other side of the draw; I wouldn't have taken the chances that were taken to come down across the head of the draw rest.

Int. That is less than 500 yards above?

A. Yes, sir; where the ice keeps you can take a boat & throw her right where you want her; you have got to have time, especially in a big current like that.

Int. What kind of a current is this along there?

A. Well, a very strong current; always was a very strong current there, especially when the river is broke up.

352 Int. Well, if you had been coming down on the north side of the floating ice would you have taken the north side of the draw, then, as the safer side to take?

A. Well, naturally I wouldn't have undertook it if the ice had crow-ed me down so far; there would be no chance for me coming through the south side of the pier; I would have to take the north side; I should have had to done it if it was in such a shape that I couldn't back my boat up and it would force me to go down the same as I was.

Int. State if the wind has any effect on the boat in navigating her.

A. O, yes; yes, sir.

Int. State what effect it does have.

A. When a boat is away out—when she is under way—when you stop your boat the wind has a great deal of effect; you can't do much with a boat in the wind; as long as you keep your boat agoing fast

why the wind don't have as much effect as when you are going slow, as when you stop your boat you loose way—that is, the speed; every time you stop the engine you loose speed; that is what I mean by way.

Int. Are you familiar with the channel where the bridge is built—that is, were you familiar with that channel before the bridge was placed there?

A. Yes, sir.

353 Int. Will you state if the draw is placed parallel with the current there, the draw rest & the piers parallel with the current?

A. Well, I can't say that it is—that you can fix it to come across on account of the shape of the river.

Int. Were the piers placed as near parallel to the current as they could be?

A. Yes, sir.

Mr. LADD: I object to that question as leading.

Mr. CARR:

Int. Do you know how deep the water was in the south side of the draw?

A. No, sir; I don't. I don't know. I suppose it is about 18—19 feet—somewhere along there; I don't know. I never measured the water there, but, the river being so narrow, I think that when they first built the bridge they pronounced that to be water.

Int. Do you — how deep the water is on the north side of the draw?

A. No, sir; I don't. I don't know any more than what I judge from the looks of it.

Int. What depth of water did the looks indicate?

A. I don't think there was much difference in the two, only I thought it was the most convenient to come down on that side; that is the reason I came on the south side of the draw.

Int. Can steamboats take the depth of water easily in the river?

A. O, yes; they can take it at any time.

Int. How do they do it?

354 A. By taking the lead; by heaving the lead and measuring it at just such a place as that; they never had occasion to take the lead, because it is a sure thing that the water is deep enough.

Int. They take the lead where they think the water isn't deep enough?

A. Yes, sir; place where they expect to fill up; where I expect the channel to fill up—that is, where I take the lead, but that place I don't expect to fill up; I don't expect it to fill up, because there is no place for the water to go above.

Int. Could the sinking of the pontoons in the line in which they were placed make a cross-current?

Mr. LADD: I object to that question as leading.

Mr. CARR (in continuation): In the south side of the draw, I mean?

WITNESS: No, sir; I can't say that it does, because they lay so far under this rocky point; there is no cross-current; where is the cross-current to come from? Out of that bank (indicating)? It forms an eddy under it, of course. As I said before, there are more or less currents there. Currents on the edge forms eddy water. There is always some cross-current.

Int. Is that the nature of the Missouri river, to have cross-currents?

A. Yes, sir; in places under a point like that.

355 Int. Could these pontoons sinking across the channel there create a cross-current?

A. No; they couldn't stay there; that there water would wash them down straight; they couldn't set across that current; if they were iron boats they couldn't lay across the channel; it would wash them out straight; I knew of a boat that lost her wheel & shaft up in Sawyer's Bend & it was found below the mouth of the Missouri; I don't know what boat it was; maybe it was the Joe Kinney; the Mississippi has not got as much current as the Missouri.

Cross-examination by Mr. LADD:

Int. Captain, when you speak about a rocky point you mean a place where the natural rocky shore commences above the bridge, don't you?

A. Not where it commences; no, sir; where the natural rocky shore commences; the point is where it partly commences.

Int. It is a bend, is it?

A. It is the foot of the bight.

Int. The natural rocky shore that you speak of there is right at the foot of the bend; at the foot of bight, is it?

WITNESS (referring to map): The foot of the bight, the bight of the bend, is here; it almost commences with the shore (here);

356 then commences at the point of the bend (here), and then comes down here.

Int. You say that is about 400 yards above the bridge, you think?

A. Well, I judge it to be 400 or 500 yards; I can't say the exact distance.

Int. Now, what is that, an easy curve or not; what sort of a curve around down the river?

A. It is a curve after you get below the bight on this bend.

Int. Now, Captain, do you know when those pontoons sunk?

A. Well, I think—I have missed them for two or three years.

Int. You say you came down last fall?

A. Yes, sir.

Int. Where from?

A. Fort Benton.

Int. With what kind of a boat?

A. Stern wheel.

Int. Small boat?

A. No; not so very small.

Int. How long was she?

A. 200 feet, over all, long; 33 feet bottom—33 or 33½—something along there.

Int. Were you loaded?

A. No, sir; very light.

Int. You went up with the same boat, did you?

A. Yes, sir.

Int. How many times did you come down through the draw last season, just that once?

357 A. I came down twice; came down once and through once & went up once.

Int. What time of the year?

A. Up in the spring & down in the fall; it was, I think, in November.

Int. The year before did you come down in the fall with a stern-wheeler; did you go to Benton before?

A. That would be 1875; yes; the same boat.

Int. You came down through there in 1875 once?

A. Yes, sir; in the same boat in 1875; yes, I came down, went up, & came down again.

Int. You came down through the draw—that is, once in 1875 & once in 1876?

A. Yes, sir.

Int. Well, the year before did you come down through it?

A. No; not further than Sioux City?

Int. In 1874 you didn't come down through it?

A. No, sir.

Int. Captain, suppose a man brings his boat around the bend; suppose a pilot were bringing a side-wheel boat, 215 feet long, down around the bend, coming straight through, hug-ing the Kansas City shore in the usual way, with the pontoons sunk, & he gets his boat—the prow of his boat—within a hundred feet of the drawbridge in shape to go through in safety, coming straight down as was usual, he would go through, wouldn't he?

358 A. Yes, sir; if he had his boat in shape to go through in safety; yes, sir; he would go through.

Int. If his boat was in that shape it wouldn't be affected by this cross-current which you speak about, so as to throw him off on the draw rest?

A. No, sir; if he was out here (indicating on map) in good shape, as you say, to go through; not if he is in good shape.

Int. This cross-current which you speak of starts up 3 or 400 yards above the bridge?

A. Yes, sir; I think so.

Int. That current strikes out three or four hundred yards above the bridge?

A. Yes, sir.

Int. Now, how soon after passing this place where the current strikes out with a boat will the boat feel its effect; how many feet after passing the — of the place where the current strikes, after passing this rocky point even with the bow of the boat?

WITNESS (indicating on the map): There is where you make your turn to go inside of the end; there is a strong body of water.

Int. How long after passing the point where the current strikes out will the boat feel its effect?

A. Well, it will feel its effect where it gets to this point of rocks; it will feel its effect more than it did before it got to the rocks.

Int. It wouldn't feel it at all until it got to the rocks?

A. No, sir; of course not; that point shoves it out.

359 Int. So that if a boat attempting to pass through the bridge got down with her prow within one hundred feet of the superstructure of the bridge without having been thrown over towards the draw rest by this current coming down in such a shape that it hadn't been forced over by this current, it would go through safely, wouldn't it?

A. Yes, sir; when you got down within a 100 feet of this draw, even with the draw, you were too far out to go with safety. At the draw rest your bow would clear that, but your stern & larboard wheel would catch on that (indicating) point.

Int. You don't seem to understand my question, Capt. Suppose a boat 215 feet long, coming around the bend to go through the bridge, had come down so that her prow was within a 100 feet of the superstructure of the bridge (indicating on map)—that is, the middle rest—middle pier—without having been forced over in any way by this current which you speak of up to that time would she go through safely?

A. That is according to whether he was close enough to the inside pier or not. The accident shows that the boat did not go through safely; but you got your boat in shape, of course. I don't know what shape they had their boat in.

Int. But suppose the boat had come down to within—say her prow was within 100 feet of the bridge herself, without having been forced over in any way by this cross-current that you speak of, would she go through there?

360

A. That is, if she was a 100 feet from here, how far would her stern be?

Int. I mean coming straight through?

A. Why, she could miss it. Here is what I would do (indicating on map): These piers out here or draw rests—I would hug those piers.

Int. Those piers ain't there now?

A. I am talking about the pier—I am hug-ing the pier. These don't have to be there. You can hug the shore without hug-ing them as you hug that inside pier. You can make your calculation even above these places (indicating).

Int. Suppose a boat was coming down here headed for the inside pier, you say that is correct, do you?

A. That is correct.

Int. Suppose a boat was coming down and as close to the Kansas City shore as possible, and headed for the inside pier, coming in that general direction, & comes in that way until her prow get- within 100 feet of the bridge?

WITNESS: Then how far is she away from the inside pier?

COUNSEL: I say heading.

A. You can still head off your boat, and maybe she is flanking over.

361 Int. No, no; the boat is keeping straight up with the channel?

A. Of course if the boat is keeping straight she will go through all right.

Int. If a boat got into that position, then, without having been turned over by this cross-current which you speak of it wouldn't be turned over, would it?

A. Well, if she was all straight up to that time she wouldn't be flanked over by the current. No; she wouldn't have a chance to flank. They couldn't stop her to give her a chance to flank—that is, when it comes down to these piers.

Int. Was the bight of the bend cut out more the last time you come down than it was the time before that?

A. Well, I don't know whether it was just exactly the last time, but it has been cutting all the time till they riprapped it. I think still that it had cut—and I still think that it has cut down to the bed of the rock, even, in the bight of the bend—that is, in the bend of the river. On the shore there may be a bottom left, but down in the bight of the river I don't think it can cut down any further.

Int. When did they riprap that?

A. I disremember. I don't know. I don't hardly think I know what year it was.

Int. How long after the bridge was built?

A. Oh, it was some time after the bridge was built.

362 Int. Three or four years?

A. It was just when they were finding that it was cutting the bottom away. Now, I couldn't tell whether it was since that or not. The bottom was cutting away very fast, and they didn't want to loose that bottom there.

Int. You say that the effect of such a current that you speak of from the point above is to throw it across towards the north, do you?

A. Yes, sir; it throws over that point of rocks, It don't throw it much before. My own experience is what I am speaking of here. Before that bight of the bend was cut down it wasn't thrown out so much. It throwed it out straighter before this bight of the bend was cut.

Int. That bight hasn't cut out any since the riprapping was put in?

A. I don't think it has since, but I think it has cut down into the rocks where it couldn't. I suppose not since the riprapping has been put in.

Int. Now, you say you think this cross-current is stronger since the sinking of the pontoons, but you attribute it to the cutting out of that bight?

A. Since that bend was cut down. I am not speaking of the sinking of the pontoons. I should think that would make it

363 straighter & better towards that shore, because it would fill under with sand & make a straight shore of it after you got

below the point—that is, I should think the sinking of those pontoons would be an improvement for navigation. Anything put there & filling that shore up would bring it out even with that—would make the shore straighter.

Int. The sinking of the pontoons, then, in your opinion, would be an improvement to navigation, would it?

A. I don't know that the sinking of anything——

COUNSEL: Would be an improvement?

A. Would be an improvement, because it would bring the shore out straighter with this point.

Int. Mr. Ohlman, you think those piers were never built parallel to the current?

A. No; I don't.

Int. Were the piers built parallel to the current of the river?

A. No, sir; not exactly.

Int. The current was crosswise of the piers when they were built?

A. Yes, sir; when they were built. I think so.

Int. Do you know whether the sinking of the pontoons has had any effect on the landing down here (indicating on map)?

A. I landed there last spring.

Int. Has it had any effect on the landing there?

A. Well, that I don't know.

Int. Don't you know that the land is filling up & has been for the last 2 or 3 years?

364 A. That is what I say of those boats; they are throwing dirt over the bank, too.

Int. Wasn't a bar formed below there on account of the sinking of those pontoons?

A. Yes, sir; it has been filling up down below the landing, but they are throwing dirt over the bank, which fills that up.

Int. Captain, who have you talked with about this case?

WITNESS: Sir?

(Question repeated.)

A. I never have talked with nobody about this case. I didn't know there was anything going on until I was called for last night.

Int. Who sent for you?

A. This gentleman, Mr. Carr.

Int. Did he go out to your house & have a talk with you?

A. Well, yes, sir; he came out there & asked me to come down to-day.

Int. And talked with you about the case, did he?

A. Well, he—yes, sir; he spoke to me about the case—in regard to the matter.

Int. Have you been subpœnied?

A. No, sir; nobody didn't subpœny me. It makes no difference what we would have talked about at that time. I have stated the matter. That is all the statement I could have given. It would have made no difference whether he talked to me about it or not.

365 Redirect examination by Jos. CARR, Esq.:

Int. Mr. Ladd asked you about there being a bar—a sand bar forming below the bridge. Now, is it eddy water there that has a tendency to create that sand bar?

A. Well, I suppose that would; but there has always been a bar there. Unless the water was very high you couldn't come upon the shore, even for the last 15 years back. If I remember, the channel has run over to the north side of the river from that point of rocks, but not as bad as it is now. It has filled in down below the landing there—right out to the landing.

Int. Just below the bridge is the- eddy water?

A. Yes; always has been eddy water just below the bridge.

Int. What is the tendency of the eddy water in regard to forming a sand bar?

A. I thought it was the point of rocks above. Any point reaching out into the river there will have eddy water form underneath it.

Int. When the eddy forms what effect has it in forming a sand bar?

A. It generally fills up.

Int. Is that the usual effect in the Missouri river?

A. Yes, sir; fills up might- quick in the Missouri river.

Mr. LADD: You don't know of any current striking out
366 from the shore to the place where the head of those pontoons were. Did you notice any current there striking out from those pontoons?

A. There was more or less current there all the time, but it didn't form an eddy.

Int. Do you know anything about any current commencing at the head where these pontoons were, right over towards the draw rest?

A. No, not right there. This current that runs from this point of rocks to here (indicating) makes some slight current, of course, down below this point (indicating). It don't form an exact eddy water right down under this point (here). A scattering current is made to come down, & the further down it comes the slacker water it will be.

[Mr. CARR: The current formed by the point of rocks. Whereabouts does it strike the draw rest of the bridge—anywhere or any part of it?

Mr. LADD: I object to that question as leading.

A. Oh, yes; it comes right out to the head of the draw rest, & part of it strikes the pier and the other draw rest.]*

J. B. La Barge.

The defense next read in evidence the deposition of JOHN B. LA BARGE, which is in words & figures as follows:

Int. Captain, state your name, age, residence, & occupation.

* Words in brackets excluded because leading & contradicting of answer.

A. I live in the city of St. Louis here; steamboating has been my occupation; piloting & commanding steamboats for a good many years.

Int. Well, about how many?

367 A. Over 35 years; nearly 40, I reckon; my age is 57 years.

Int. State in what river or rivers you have steamboated.

A. On the Missouri river principally, sir.

Int. Do you know where the Kansas City bridge is located at Kansas City?

A. Yes, sir; I do.

Int. Are you familiar with the channel at that point?

A. Pretty well, I think.

Int. Describe which side of the river, from Wyandotte or the mouth of the Kaw river, the channel is down to the bridge?

A. It is close down the Kansas side—the south side, as you call it.

Int. Well, state if there is any curve or bend in the river there, and to what extent?

A. There is a curve; well, it makes a general bend all the way down around from Wyandotte until you get about 400 yards from the bridge; I should think so—that is the distance.

Int. State the direction of the shore—that is, from that point past the bridge?

A. Well, that makes the shore bend in a little in here (indicating on diagram prepared by counsel), just above the head of the bluff.

Int. From that point there how is it coming on down this point of rocks (here), which is about 300 yards at least above the bridge to the point of rocks; then from the point of rocks what

368 is the direction of the shore?

WITNESS: The direction of the shore?

COUNSEL: Yes, sir.

A. Well, then it is pretty nearly a straight shore, easterly direction; southeast direction, I should judge, from there, or nearly east; I don't know the exact points of the compass.

Int. Up to what you call the bight of the bend, state now what kind of a shore it is.

A. What I would call a bight of the bend is the deeper spot, the crook—the deepest crook.

Int. Well, what kind of a shore is it from that down?

A. From the bight of the bend down (here)?

Int. Down to the bridge or a little below the bridge?

A. It is a rocky shore.

Int. A natural formation of rock?

A. Yes, sir, and down below the bridge; as far as I am a judge I should judge it so.

Int. Now, state if this point of rocks has any effect on the current there; and, if so, what that current is.

A. Well, it has the effect, sir, of throwing the current out.

Int. Into the river?

A. Yes, sir; out into the river.

Int. Towards the other side?

A. Yes, sir; towards the other side.

Int. Well, now state how strong a current it makes; what kind of a current would you call it that it makes there?

A. Well, it is a natural current.

369 [Int. Is it a cross-current?

A. Not right there; I wouldn't call it a cross-current when you get out here (indicating); out below the point of rocks there is a current.

Int. Is that a cross-current formed by the point of rocks?

A. Yes, sir.

Int. Now, whereabouts does this cross-current formed by the point of rocks strike the bridge or any part of the bridge?

A. Well, the current strikes out for this centre-table pier, whatever you call it—the pivot pier; yes, sir.

Int. How does it run with reference to the draw rest—the upper draw rest?

A. Well, it strikes right out for it, sir.]*

[Int. Right out for the upper draw rest?

A. Yes, sir.

Int. Well, state how strong a current that is.

A. Well, that I couldn't state, how strong; it is a pretty strong current, sir, because that is a place that has always been noted for a strong current in the river always. I have seen it sometimes difficult for a steamboat to stem it there.

Int. In ascending the river?

A. Yes, sir; a very strong current in the river.

Int. Well, now, in descending the river & attempting to pass the south side of the draw, does that have any effect on the boat; and, if so, what effect?

A. Certainly; it has a big effect on a boat; you have to

370 guard against that, to hug this Kansas shore very close; you must try and keep out of this outside draw; keep down the shore as close as you can.]†

Int. What do you mean by the outside draw?

A. This draw rest I mean by the outside draw.

Int. Do you remember a line of pontoons that was placed from pier No. 1 upon the south side of the draw?

A. Yes, sir; I do.

Int. Do you recollect of missing them from there since?

A. Yes; I have missed them; I couldn't state how long back I have missed them.

Int. Two or 3 years?

A. Well, I never charged my memory with it; it must be two or three years. I haven't been as much on the lower end of the river latterly as I used to be in olden times.

Int. Well, have you passed through the south side of the draw since you have missed those pontoons?

A. Yes, sir; several times.

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*Words in brackets excluded because contradictory of answer.

†Words in brackets excluded because testimony as to facts contradicting answer.

Int. Now, state if there was any difference in the current since you missed the pontoons & what it was whilst they were there.

A. Well, sir, I didn't see any difference; it was always an ugly place to go through. I have taken the same precaution to go through when the pontoons were there. I hadn't noticed any difference in the current; no, sir.

[Int. Did you notice any cross-current?

A. The usual cross-currents that have been in that place.

371 Int. They were there before the bridge was built?

A. Oh, no; not before the bridge was built. Those piers caused a different current from what it was before.

Int. Does the deepening of the bend (here) just above the point of rocks?

A. That has changed the current, sir. When the bridge was first built we used to come to it in a straight line. Since the bend has been deepened it has been made a deep bend here (indicating), which throws a current out against the draw rest.

Int. Well, is that the principal danger now in attempting to pass through the south draw? This current created by the deepening of the bend.] *

Mr. LADD: I object to that question as leading.

[Mr. CARR: Just wait, captain; I will change that question: Does the current created by the deepening of the bend increase the danger in passing through the south draw; and, if so, to about what extent?

A. Well, I should suppose, as far as my judgment is concerned, that the deepening of that bend makes it more difficult to run this south draw—for steamboats—makes it more difficult.

Int. Why does it make it more difficult when it comes here?

A. You have got to make this—run this bend (here), and it throws your boat in no very good shape to take the south draw.

Int. State how it throws your boat in bad shape.

A. It throws your boat heading out to miss this point of rocks; then you have to turn in to pass through this draw.

372 Int. In the meantime the current is deflecting your boat how?

A. Carrying it out, sir.

Int. Causing it to flank?

A. Yes, sir.

Int. In flanking, then, it has a tendency to flank against the upper draw rest?

A. Yes, sir.]†

Int. State with reference to the flow of water along them; how the pontoons were located when they were in position.

A. They were located from this inside pier (here) up as far as extended. Well, I never measured it—about 360 feet.

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* Words in brackets excluded because contradictory of answer.

† Words in brackets excluded because following up the answer to leading question objected to.

Int. Well, how were they with reference to the flow of water down through the south draw?

A. I don't know.

Int. Were they parallel or did they cross it in any way?

A. They crossed it a little. *There* heads were inshore, and (here) (indicating) they were shoved out right parallel with this pier, fastened to pier No. 1.

Int. Was the general direction of the flow of the water parallel with the pontoons?

Mr. LADD: I object to that question.

A. The water was not exactly parallel with them, as I stated before.

Mr. CARR:

Int. The flow of the water, I mean?

A. I don't know. As far as I know, those pontoons had no effect whatever on the water—on the current; they went down to the bottom of the river; they were merely afloat there & boats could pass
373 alongside of them.

Int. Whilst they were in position?

A. Yes, sir.

Int. I mean were they parallel with the flow of the water—the water flowing down?

A. Not quite, sir; not quite; they were a little; I should call them a little crossways of the current, because the head of the pontoons was fast to the shore, and then down here (indicating) they were fast to this here pier No. 1.

Int. What was the general direction of the water in the south side of the draw?

A. Well, it has always inclined to fill out towards the north side of the draw. The principal thing in running steamboats up there was to guard against the outside pier.

Int. The inside pier; you mean the shore pier?

A. Yes, sir; the shore pier; Kansas City shore pier No. 1.

Int. Suppose those pontoons sunk in the line in which they were originally placed, would that create a cross-current?

A. I don't know how they could, sir.

Int. Suppose they sunk transversely to the current?

A. Well, if they were sunk crosswise they would create a great deal of trouble if they remained there; but I don't think they could well remain there crossways; the tide would naturally wash them down, sir; they were light boats—nothing in them.

Int. Have you been through the draw since the bridge has been built?

374 A. Every year? No, sir. I think there is one or two years, I wouldn't be certain, maybe not more than one, that I didn't go through the bridge. I am steamboating up above the bridge.

Int. Well, now, have you been at the wheel or on watch, they call it, passing through there?

A. Yes, sir.

Int. Ascending & descending, both?

A. Yes, sir; often.

Int. Now, just describe, if you please, which side of the draw, in the south side of the draw, or what way, you always aimed to run your boat.

A. I told you that awhile ago. I always hug this Kansas shore (here) as close as I could.

Int. Did you experience any trouble in going through there when you hugged that shore?

A. I never had any trouble, but it is pretty close work, sir.

Int. Well, what was your rerson for hug-ing the Kansas City shore?

A. Because the current naturally pulls out towards that centre pier always—towards the pivot pier & draw rest.

Int. Suppose you, in entering or being about to enter the south side of the draw, you had been about the middle at the bight of the bend—that is, about midway between the upper end of the pontoons & the draw rest, could you have passed through with safety then?

A. I don't understand your question.

Question repeated.

375 A. There would be risks then of not going through safely.

Int. On what account?

A. On account of striking the draw rest.

Int. If you were out so far as to strike the south side of the draw about endway could you go through with safety in that position, starting in that position?

A. I wouldn't like to start in that position, but a man might go through in safety.

Int. You would consider it a hazardous position to place your boat in in entering the draw?

A. Yes, sir; the risk would be a great one.

Int. What is the reason for that?

A. Because the current is fulling out here all the time.

Int. What do you mean by the current?

A. I mean the current—the water from the point of rocks—heads out.

Int. Well, what distance above the upper draw rest could a pilot stop his boat & back her out so as to get a better start into the draw—or safer start?

A. Well, sir, that would depend a good -eal on the water. If a man had a good day a man might come within 100 yards & back out in a good day, & the wind favoring, or without any wind.

Int. Have you run both kinds of boats through?

A. I have; I have run large boats through there & small boats.

376 Int. Suppose the wind were blowing pretty strongly up the river here?

A. That wouldn't effect much; straight up wind wouldn't effect much; a side wind is what would effect us. If you have a straight

wind it don't effect you so much as a wind coming across the river.

Int. Suppose the wind were blowing from the northeast and struck the boat, how would that effect you?

A. That would blow you right on the Kansas shore. It would be pretty difficult to go through the bridge then, sir. You couldn't stop about there at all; as the sailor would say, you would have to mak- to centre shot, or something of that kind.

Int. Suppose the wind were blowing from the southeast then & struck the boat?

A. That would be naturally up stream; the bluff would protect you then; from the southeast it would strike quartering; it wouldn't be so bad as the northeast; that bluffs there protects the wind coming from that side, but from the opposite side it is bad.

Int. Does the wind blowing strongly have a tendency to render the boat unmanageable?

A. It don't render it exactly unmanageable, but it take- a great deal of room to handle them in, sir.

Int. Well, in passing through a draw like the south draw at the Kansas City bridge does it increase the danger?

377 A. It does; sir.

Int. To what extent?

A. It makes it a great deal more dangerous, sir.

Int. Suppose the wind were blowing pretty strongly then from the northeast, what course could a pilot take in order to pass through safely? How would a northeast wind strike that bridge then?

A. A northeast wind wouldn't hurt him much. It would be very nearly up stream; straight up & down don't effect so much. It is the side winds, quartering.

Int. Striking from what quarter, then, would be the more dangerous—from the larboard or starboard side?

A. From the outside.

Int. Starboard, you mean, or larboard?

A. From the outside—the Kansas shore; when coming from that way would have more effect on the boat, because there is nothing to break it then—that is, the one coming from the west; the southwest wouldn't effect you so much there, because the bluff or high hill protects you.

Int. The southwest wind would be in your rear?

A. Yes, sir; it increases the danger, for it strikes us by the side.

Int. Suppose it struck you from the larboard side coming down?

A. Well, it would have a tendency to throw you out on this draw rest. It would make it still more difficult.

Int. Suppose, in turning this bend here, before the boat can
378 straighten so as to run through the south draw, they struck the current from the point of rocks and this wind was blowing from the starboard side, striking the boat quartering. What effect would that have upon the boat?

A. That would have a serious effect—would blow her out against this pier—this draw rest.

Int. In that state of the case what would be the safe course for a pilot to take?

A. Well, sitting here, that would be pretty hard for me to give you an answer.

Int. I am asking you as an expert.

A. That is a matter of judgment. When a pilot sees he can't go one way he generally tries to go another. Well, if I was to go there & couldn't back my boat out—now, that is the great advantage of those pontoons there; when those pontoons were there they would drop a boat down all the time. I know they answered that purpose very well. I don't know whether they were fixed for that purpose or not, but coming through them in the night we would come alongside of them pontoons & drop, but as regards a boat I don't see that it would help it or hurt it. There is some boats that we can run in any wind. There is other boats that the least wind in the world is a botheration to us, & boats all don't handle alike. I have been on some boats that I would back out from any place, & have been on others that you couldn't handle—couldn't hardly back out at all.

Int. State whether the piers of the bridge were built parallel with the current.

379 A. I think they were, sir, as near as I can tell, but they are not now; there has been a big change in the river since the bridge was built; above the bridge at the bight in the bend the bank is cut away a great deal.

Cross-examination by Mr. LADD:

Int. Captain, how often have you been up the Missouri river?

A. Last year I went up the Missouri river twice & come down once with steamboats.

Int. What time of the year was it when you came down?

A. I came down in the fall some time.

Int. Well, the year before—that would be 1875—how many times?

A. I didn't come down but once in 1875.

Int. Was that in the fall, too?

A. Yes, sir; very late in the fall.

Int. In 1874 how many times did you come down?

A. I don't recollect, sir; there is one year I missed. It might —'74 or it might be '73; I don't know which.

Int. This current which you speak of striking out from the shore is at the foot of this bight?

A. Yes, sir; just a little below the bight; yes, sir.

Int. It is where the water first strikes the natural rocky shore?

A. Yes; there is — prominent point just below that that strikes it out more.

Int. The natural direction of the shore from the foot of the bight is east?

A. I should think so.

380 Int. It straightens from there pretty much—that is, the bend ceases from there and it is nearer straight.

A. Yes, sir.

Int. Well, now, these pontoons were of considerable assistance to boats in going up & down.

A. Yes, sir; they were when they were there, particularly boats

there at night; they would slide along & make just to the pontoons.

Int. Now, Captain, after the pontoons were sunk, how would you bring a boat round the bend through the bridge?

A. I have already described it to you. It would have to be hug-ing the Kansas side as close as a man could do it, not be afeard of the inside pier at all.

Int. You do that all the way around after you leave the bend?

A. From that point of rocks then hug the Kansas shore as close as you can; that is done in order to avoid this outside draw & to avoid this draw rest.

Int. Now, Captain, has there been any change there since the riprapping has been done; has there been any cutting out since the riprapping?

A. No, sir; I have seen none.

Int. So that the flow of the water out from the rocks is the same as it has always been since the riprapping was finished.

A. Yes, sir; I have never seen any change.

Int. What time of day was it when you came down the last two years; do you remember?

381 A. It was all in daylight.

Int. In coming down you say you keep as close to the shore as you can & head your boat for the inside pier, do you?

A. Yes, sir; heading toward that pier as close as I can aim & run as close to that pier as I can, & I don't think it would be an easy job to hit it.

Int. Do you aim to keep your boat parallel with the south shore coming down there?

A. Yes, sir.

Int. Captain, when you are coming down in that way & have divided the effect of the flow of the water out from the bend until you have got within a hundred feet of the bridge itself, you don't anticipate any danger then, do you?

A. No, sir; not if my boat is headed right.

Int. How far from the shore would you be, Captain—how far would your boat be from the south shore—in passing where the head of those pontoons were after sinking?

A. I would aim to be just as close as I could run with safety.

Int. You say since the —; have you noticed the places there very closely since the pontoons sunk?

A. Well, I can't say that I have noticed it very closely; a pilot going through there, why, he generally has his eyes open; always has to be careful & always with his judgment & his senses about him. I don't like bridges, sir.

Int. You say if the pontoons had sunk transversely to the

382 current—across the current—you think they would have made trouble if they had staid there?

A. That is a very swift point at Kansas City.

Int. I was going to ask you how they would occasion the trouble; why would the sand throw up against it?

A. Yes, sir.

Int. There would be a deposit of sand around it?

A. Yes, sir; there would be worse cross-currents than there is now.

Int. If they staid in the bed of the river crossways the collection of sand & other sediment about them in time would cause a cross-current.

A. It would cause that immediately, sir; it would form a large break running out of an eddy into a current.

Int. It would cause a cross-current across over towards the other shore?

A. Yes, sir.

Int. Did you ever go down through the north draw, Capt.?

A. No, sir; not since the bridge is built, sir. I have been outside of the piers between the north shore before the bridge was completed, when they were working at the bridge. I came there while the other side was obstructed. I was outside of the pivot pier—the north side—but never since the bridge has been finished.

Int. Have you landed at Kansas City lately within 2 or three years, Captain?

383 A. No, sir; I have not landed there much.

Int. You don't know what effect the sinking of the pontoons has had on the landing below?

A. Only from what I have seen; going by we notice these places pretty close.

Int. What have you noticed in that respect, filling up?

A. I didn't notice much change there.

Int. But you hav'n't undertaken to land much lately, have you?

A. No, sir; we had very little business to do there.

Int. The boats that you have taken through, have they been taken to the mountains?

A. Yes, sir.

Int. Stern-wheelers, I suppose?

A. Yes, sir.

Int. Now, Captain, if you were bringing your boat around in the usual way that you speak of, headed as you state, until her head was within one hundred feet of the bridge pier No. 1, apparently in shape to go through straight, as you always have done, & the stern of your boat was suddenly thrown off onto that draw rest you wouldn't account for it by that current away out there at the rocks, would you?

A. I don't know how I would account for that; if I was going the usual way & a thing of that kind was to happen it would be something out of my experience.

Int. But you think if you had got down as far as that,

384 headed right & in good shape, that you would have got away from the effect of the current that you speak of?

A. Yes, sir.

Int. You have stated that the flow of the water out from shore toward the centre of the river starts out, I think you said, 4 or 500 yards?

A. Yes, sir; about; I won't be positive as to the exact distance; I never measured it.

Int. The stage of the water makes a difference on the effect that obstructions have on the current?

A. Yes, sir; in that bridge particularly.

Int. You would say that if these same six pontoons had sunk across the channel of the river & had staid there long enough the natural effect would be to make a break?

A. Over towards the north it would make it; I should think it would have that effect if they staid there; they would naturally fill up that south draw.

Redirect examination by JAMES CARR, Esq.:

Int. Was there any probability of the boats, the pontoons, sinking transversely to the current & remaining there in such a current as there is in the south draw?

A. I shouldn't think so, sir; they were light boats, & I think the current would naturally straighten them down.

Int. Well, if straightened down with the current, would they create any cross-current?

A. Not so much.

385 Int. Would they create a cross-current — enough?

A. Anything running parallel with the current wouldn't form near the obstruction — that anything lying crosswise.

Int. Lying parallel with the current would they create a cross-current strong enough to force a boat over against the upp- draw rest?

Mr. LADD: I object to that question as leading.

A. No, sir; I don't think they would, not laying parallel with the current.

Mr. CARR:

Int. If there had been a cross-current in the south draw strong enough to have forced a boat against the upper draw rest from the pontoons or any other obstruction, commencing at the upper end of the pontoons in said draw, could it have been seen by the pilot if on the lookout?

Mr. LADD: I object to that question as leading.

A. Well, he could see, but he couldn't well tell the effect; he couldn't well tell the effect of it until he went through once; if there was any change there the pilot could tell it, but what the exact consequence would be would be pretty hard for him to tell until he had gone through once; but then he could tell, of course, after he had gone through once.

Mr. CARR:

Int. When I spoke of a change created in this way I did it with reference to a current different from the cross-current created by the point of rocks; you answer with that view of the case, do you not?

WITNESS: That is a question I don't rightfully understand.

386 Question read by reporter.

A. Of course that would be a different one.

Recross-examination by Mr. LADD:

Int. The pontoons sinking in there and staying in there transversely to the channel would also enhance the effect of the current you have already spoken of, wouldn't it, Captain—increase it?

A. It depends upon how they lay.

Int. I say lying transversely?

A. Yes, sir; it would throw the water out.

Int. Do you know how long those pontoons were, Captain?

A. No, sir; I never measured them; I have been alongside of them frequently, but I never measured them.

Int. You have stated, I believe, that the effect of obstructions in the river is different at different times, owing to the stage of water?

A. Yes, sir.

Jos. La Barge.

The defendant next read in evidence the deposition of JOSEPH LA BARGE, Jr., which is in words and figures as follows:

Int. State your name, age, residence, and occupation, Captain.

A. My name is Joseph La Barge, Jr.; I reside in St. Louis county; I am 62 years of age; a steamboat man by profession.

Int. State how long you have been steamboating.

A. About 45 years.

387 Int. On what river or rivers?

A. The Missouri river, sir, mostly.

Int. Do you know the point on the Missouri river where the Kansas City bridge is located?

A. I do.

Int. You have — stated in what capacity you have been on the river.

A. I have been piloting and commanding boats.

Int. Now, please describe if there is any bend in the river commencing up about Wyandotte and running down towards the bridge; and, if so, about how large a bend it is, and how far, or, rather, how near, the bridge it terminates.

A. The distance from the bridge to Wyandotte must be two miles, and in that distance there is a very big bend, an unusually deep bend.

Int. On which side of the river does the current flow?

A. On the south side. The Missouri side I call the south side.

Int. About how far above the bridge does this bend terminate?

A. That terminates—well, I should say it doesn't terminate until you get to this point of rocks.

Int. What kind of a shore is it from the point of rocks down past the bridge?

A. Solid rock shore.

Int. Natural formation?

A. Yes, sir; natural formation.

Int. Now, state if the formation of the shore there creates any cross-current; and, if so, to what extent it creates that cross-current.

388 A. Well, there is a cross-current, when you come to take the bridge into consideration.

Int. I speak now with reference to this point of rocks.

A. From this point of rocks naturally a deep bend shoots the water out from the point of rocks.

Int. In what direction does it shoot the water?

A. Towards the middle pier, or draw rest, as you call it.

Int. That is a natural current created in that way?

A. Yes; the deepness of the bend makes that; the deeper the bend the more it will throw it out.

Int. Do you remember the pontoons spoken of?

A. I do. I have used them often.

Int. Well, have you missed them of late years?

A. I must say I have missed them, sir. I had to lay by there for the want of the pontoons of late years. Had the pontoons been there I don't think I would have lost any time. I remember being laid up for one whole day for want of the pontoons.

Int. Was it day or night?

A. Daylight—on account of the high wind.

Int. In which direction was the wind blowing?

A. From the Missouri shore to the Kansas shore; blowing square across the river.

Int. That struck you boat in what way?

A. I was going up the stream; the wind was so great that even if I had had a line out there, unless I could have put two or three lines, I couldn't have kept the boat off the center pier on ac-
389 count of the wind blowing from the shore. I walked up and down the river as far as the natural rock extended to find some natural fastness to which I could fasten a line, but finding none I had to stop there until the wind fell.

Int. Well, now, how does a high wind effect the boat descending the draw?

A. Generally more than ascending.

Int. Well, after you missed the pontoons did you discover any difference in the current then from what it was whilst the pontoons were in position?

A. Well, in the direction of the current, I don't think I noticed any difference, sir. This difference I did notice, that it stopped the flow of the water between this shore (here) and the number one pier, as you call it.

Int. From the effect of the sinking of the pontoons above there?

A. I didn't know that they had sunk until I saw some mention of it in a paper or some general report—an item, I think, in a newspaper.

Int. Could they create sufficient current so as to drive a boat over against the draw rest?

Mr. LADD: I object to that question as leading.

A. Well, I would conclude this, that stopping the flow of the current south of the pier No. 1 would increase it on the north side of it.

[Mr. CARR: Well, taking into consideration this natural cross-current created by the point of rocks there?

390 A. The deepening of this bend, that had more to do with throwing this current out in this middle pier than anything else when the bridge was placed above; this bank was near straight, and the current was down straight & would take a boat right through; but since the deepening of the bend, as the bend got deeper the current got more crosswise than it did before. It would deflect the current in that direction.]*

[Int. Well, the current being deflected by the deepening of the bend from the point of rocks, what effect would that have in flanking a boat against the upper draw rest?

A. Well, it would have, of course, some effect, sir; the distance is so short it would have considerable effect. A man would have to be as quick as possible to get his boat into the south side to clear this this rest, and any wind blowing from shore towards them would make it almost impossible to get by that in safety over from the south shore, so that the wind and the effect of the cross-current from the point of rocks would naturally throw you over, and the wind would increase the danger of being thrown over on the draw rest.

Int. Were these points that a pilot should have an eye to in running his boat through the south draw?

A. Oh, yes; certainly. They never run through but they consulted with me a good deal before we get there how to go through there, I taking all directions.]†

Int. You would give him the directions as master of the boat?

391 A. I would give directions & assist him if I thought he needed them.

Int. Have you been at the wheel yourself in going through?

A. Yes, sir; often.

Int. Well, when you took a boat through when you were at the wheel how did you run the boat in descending the river (here); what side?

A. Always hugged the south side; run as if I wanted to hit No. 1 pier, because it is almost impossible to hit it; the current carries you away from it all the time; there is no danger of hitting that pier.

Int. It is necessary, then, to hug the south side as closely as you can to go through with safety, in order to prevent flanking against the draw rest?

A. Yes, sir; yes, sir; it would be more difficult, of course, according to the different stages of water.

Int. In what stages of the water is it most dangerous?

A. In the high stage; the stronger the current, the greater the danger; that current varies there from 3 to 10 miles an hour, depending upon the stage of the water.

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*Words in brackets excluded because contradictory of answer.

†Words in brackets excluded because relevant only to questions and answers excluded.

Int. Well, at the ordinary stage, what is the rate of that current?

A. I think it is about 4 or 5 miles an hour.

Int. The cross-current created by the point of rocks—how long—from what distance would a boat run before it would be free
392 of the effects produced by it—the tendency to flank?

A. A boat wouldn't get clear of that influence there until she got through the bridge.

Int. The effect on the boat produced by the cross-current from the point of rocks continues until you reach what point in the draw?

A. Until you get through it; well, you might not exactly get through it before you loose the effect of the cross-current formed by that point of rocks, but still it would be very nearly through.

Int. Well, if the pontoons had sunk on the line in which they were placed could they have created a cross-current that would have effected a boat in any ways seriously?

A. I think not, sir, if they sunk in a straight line.

Int. Why?

A. Because they would have been straight; the current would have run down by the side of them.

Int. Suppose they sunk transversely to the current?

A. Then it would throw the current out.

Int. Suppose the water is 20 feet deep & these barges were only 5½ feet?

A. They wouldn't effect the current very greatly only at low stages of water.

Int. Say the water is from 15, say, to 20 feet deep in the draw from the upper draw rest down, and these pontoons were sunk transversely to the channel & remained there, could they create a cross-current in the draw?

393 A. Well, they would have a tendency to throw the current away from the shore at a moderate stage of water; they would make a break there from the wrecks of these flats that are being — there, but I don't know whether the stage of water is over them on this south side.

Int. How far does that break show itself?

A. About on a line with pier No. 1.

Int. How far does it show itself over at the north towards the draw rest?

A. I mean in line with this pier, No. 1. I never noticed it to show outside of that line.

Int. Well, then, could it create a cross-current so as to shove a boat over against the draw rest?

A. At low water it would create more current than at high water, because they would be nearer the surface.

Int. Wouldn't the current be so weak that it wouldn't effect much?

A. Not so much as in high water; it would effect the current more in low stage of water, in my opinion, than in high water, by reason of these being nearer the surface.

Int. Is there any probability that these boats could sink transversely to the current there across that draw & remain?

A. I think not. I don't think they could have remained there.

Int. And if they sunk parallel with the current that wouldn't create a cross-current, as I understand you, to effect the passage of the boats?

394 A. Up & down? No, sir; they wouldn't effect the current there.

Int. Captain, how near could a pilot approach the draw rest—the upper draw rest—& stop his boat if he found it was flanking against the draw rest by the current & back out & put his boat in position to go through with safety?

A. 300 yards, I think; some boats don't back right. If he has got a good boat, a boat that handles well, in 300 yards distance she could save herself.

Int. Would she have to back up the stream & take a fresh start down?

A. Oh, yes, and straighten herself preparatory to running through the draw.

Int. How near to the upper draw rest could a boat approaching it, her bow got about opposite to it, could she pass through safely, that her stern or side wouldn't strike the upper rest?

A. Some distance above it; at least 200 yards above; the misfortune is if you get in that position that the space is not great enough here for you to square your boat & work a full stroke—to give her full room; it is not room enough to work about as we would like; therefore, he should back her and get her into position to come down again.

Int. You would fix it, then, at about 300 yards?

A. Yes, sir, I think so; if there is no wind.

Int. But if she comes nearer than that it is dangerous?

A. Yes, sir; I wouldn't like to try it.

395 Int. Suppose the ice was running pretty freely, say, freely enough to fill the south draw tolerably full & the boat were running down on the north side of the floating ice, what distance above the bridge—I mean the upper draw rest—should the pilot commence to run into the ice in order to hug the Kansas City shore to go through with safety?

A. From above that bight he must follow until he comes into the bight.

Int. That is about 500 yards you think?

A. 500 or more yards.

Int. Well, would you consider it bad piloting to attempt it at a less distance than that if the ice were floating down the channel there, he being on the north side of it coming down from Wyandotte?

A. I wouldn't consider it very safe piloting. A man ought to get his boat into the ice and let it run with the ice.

Int. A pilot looking out in passing through the draw or approaching—could he discover if there was a cross-current in the south side of the draw (here)?

A. Oh, yes. Pilots used to it can discover it very well in the way his boat flanks. A pilot has to watch that.

Int. Could he judge of the effect it would have before he struck it?

A. Oh, yes. We have to make such calculations as that all the time. A man not used to seeing & running on that river
396 would just make up his mind that the boat is going to run through snags, but still when he goes through he finds that his boat goes over them.

Int. A pilot there must judge of cross-current before he approaches it?

A. Yes, sir.

Int. Before he strikes it?

A. Before he strikes it; yes, sir; he must watch it; aim to let the current help him as much as possible, & note the effect of it on his boat.

Int. If he should miscalculate as to the effect of the cross-current in the draw (here) the first time he passed through it he would know better the next time?

A. He would know better the next time.

Int. He would be taught, then, by experience the exact distance?

A. Yes, sir; in going through the draw if he misses the draw ten feet he will look back & reckon mentally as to what made him get that close, and next times he makes his calculation different and tracks his boat differently. The pilot on a steamboat knows what his boat can do. Some boats can do a great deal more than others—handle a great deal better.

Int. Some pilots handle boats much better, too?

A. Oh, yes; there is a great deal of difference in the handling of boats by pilots.

Cross-examination by Mr. LADD:

397 Int. Captain, this point that you speak of, when the water flows out from the shore towards the north shore, is the commencement of the natural rock shore at the foot of the bight?

A. Yes, sir.

Int. There has been no change there right at that point since the riprapping has been done?

A. No change since the riprapping has been done; it has been the same thing.

Int. That, you stated, was, about as near as you could, 500 yards—in that neighborhood—above the bridge?

A. Yes, sir.

Int. Suppose you were bringing your boat down in the way you say is your habit, heading for the shore pier, until you got her from within 100 feet of the pier ready to go through in shape & apparently going through all right, you would expect to go through then?

A. If you got that far down you would go through.

Int. The great danger, then, is passed, if you keep straight up to that time?

A. Yes, sir; if you were right up to that time.

Int. How soon do you feel the effect of the current that comes out from the bend?

A. Commence feeling it coming right out from the bend; we feel it immediately; we have got then to head for the south shore.

398 Int. Well, you get that out by the time that you are within a hundred feet of the superstructure of the bridge, do you?

A. Yes, sir; we aim to do it by that time.

Int. But if you get within a hundred feet of the bridge you wouldn't feel the effect of the current any more?

A. If you have got steam on; no, sir.

Int. State, Capt., what the effect of the sinking of the pontoons transversely would have on a current if they staid there long enough.

A. It is all owing to the depth of the water; if they have gone to the bottom it wouldn't be felt at all from the shore out there; at a low stage of water it would effect the current a good -eal—would throw it out.

Int. How would that effect be produced; by the collection of sand & other sediment in the river about them?

A. Yes, sir; below them; sediment would settle about the wreck.

Int. Do you know how long those pontoons were?

A. No, sir; not exactly; I have used them often; I suppose their width would be about fifteen feet and I think about 50 or 60 feet long.

Int. Those pontoons were of very material assistance to you while they were there?

A. Yes, sir; they were.

Int. When they were there the water flowed under them?

A. Or run alongside of them; we would make fast to the

399 pontoons & drop down alongside of them and lose but a few minutes. The sinking of the pontoons has had the effect of scattering the water below there. It has scattered the water and kept the current from being as strong as if they had been there. It was such a convenience there. When they were there pilots would drop through; but still many others run down without ever stopping. The effect of their sinking—it has had the effect to increase this outward current to a certain extent—that is, in low water especially.

Int. How often have you come down through there since the boats sank?

A. Within two years I went up once and down once; the year before that I was up once, and the year before that, or the year that they were sunk, I was through there very frequently. I was running then the Kansas draw.

Int. You think that the sinking of the pontoons has strengthened the outward current?

A. Yes, sir; more at low water than at high water.

Int. You don't know, Captain, I suppose, how those boats sunk into position?

A. No, sir; I don't. I don't know what position they are laying in.

Int. You had no thought that the effect of their position, whatever it is, has been to force the water outside toward the rest?

A. Yes; I know that. I noticed it more particularly last fall.

Int. If the pontoons — sunk transversely out below there, Capt., they would stay there, wouldn't they?

400 A. Well, if they sunk above that pier (indicating) I suppose they would float against the pier.

Int. Suppose they had actually sunk right there at the place where the pontoons were?

A. They would more than likely stay there in that position.

Int. Do you remember a conference here between Mr. Joy and Mr. Chanute, representing the bridge interests, and a committee of the chamber of commeree in regard to that bridge.

A. Well, yes; I remember something about it. I know that there was such a conference.

Q. Were you on that committee?

A. I don't think I was, sir. I was asked to be there. I don't think I was there.

Int. Were conversations had with reference to the bridge interests between the river interests and the chamber of commerce?

A. Yes, sir.

Int. Were you present at any of these conversations?

A. Yes, sir.

Int. What was the occasion of that conference?

A. Well, it was about this bridge to some extent—my understanding of it. The understanding I had, as a pilot then and a captain of steamboats, was that there was an agreement had between the parties representing both interests that the bridge interests was to retain & keep up those pontoons there; and if

401 they did this we would be satisfied with it.

Int. You were dissatisfied before—the river interests were?

A. Yes, sir.

Int. Had they been making complaint?

A. Oh, yes; we had been making complaints.

Int. Claiming that the bridge, as constructed, was an obstacle to navigation?

A. Yes. sir; these were our complaints.

Int. Well, what agreement did Joy and Chanute make about that, if any?

A. What I have said before; I think that was the understanding. It was agreed to keep up those pontoons there for the benefit of the steamboats, and we said if they would keep them up we would be satisfied and say no more about it; that is my understanding of it.

Int. Do you remember that they were warned at the time that the pontoons would be difficult to keep up?

A. Well, during the winter; yes; that was the question that was brought up. It would be difficult to keep up the pontoons during the winter, and Captain Gould was on the committee, and his views were, I believe, to drive down piles from the shore down to the pier; that was his views. That would obviate the difficulty of keeping up the pontoons during the winter. As I said, it has been a

long time ago, that conference, but I think, so far as my memory goes, that these were the conclusions we came to.

402 Int. Do you remember of a petition being circulated after that among the river men here, by parties in bridge interest asking Congress to pass an act legalizing that structure?

A. Yes, sir; there was such a petition—that is, I heard of it; I never saw it. I was never asked to sign it.

Int. Before this conference had the river men been claiming and complaining that the bridge wasn't a legal structure—hadn't been built according to the charter?

A. Yes, sir; generally so; lots of them did, sir.

Int. Captain, the current which you speak about running out from the mouth of the bend by the time it gets down to the bridge—between the piers of the bridge—has pretty well recovered itself so as to run through?

A. Well, no; I can't say that it has. The current divides there, and *and* a great portion of it goes outside of this rest until it gets some distance below the piers; it then becomes one current again. That current was not there before that bridge was built; on the contrary, it was a very strong current down that rocky shore all the time, making it rather a bad landing to make before the bridge was built; but since the bridge has been built it has done away with that current all the way down through the bridge. There was a strong current, and it was a bad landing to make at all times. The current was so strong that we never could come against these rocks with ease; the current would make us come in against them.

403 The building of the bridge and the throwing of this clay has caused this current to die away or go off and make a slack water.

Redirect examination by Mr. JAMES CARR, Esq.:

Int. There has been a kind—what kind of water do you call it at the bridge or just below it?

A. Eddy water; slack water ever since the completing of the bridge at Kansas City.

Int. Particularly below the bridge?

A. Yes, sir.

Int. And some of it above?

A. Yes, sir.

[Int. The cross created by the point of rocks naturally tends to the opposite side of the river, don't it?

Mr. LADD: I object to that question as leading.

A. Well, I wouldn't call it a cross-current when a current goes naturally from that deep bend over towards the other side of the river; it is the natural course for it to go.

Mr. CARR:

Int. That is usual—that is the usual course with the Missouri river?

A. Yes, sir; points will throw the current away from there.

Int. The current don't follow the middle of the stream hardly anywhere?

Mr. LADD: I object to that question as leading.

A. No, sir; it runs from one side of the river to the other—back & forth.]*

Mr. CARR:

Int. How is it in regard to the changeableness of the current of that river?

404 A. Well, it is more liable to change in straight rivers than it is in crooked rivers.

Leadford.

C. C. LEADFORD, being produced & sworn on the part of defendant, testified as follows:

Q. State where you reside.

A. I reside in Kansas City.

Q. State if you have any experience on the Missouri river; &, if so, how long & at what point?

A. I think I have had about ten years' experience; I can't remember the dates in regard to the time. The first boat was the Lacon; that was the first boat I ever tried to handle. The next boat was the Little Blue; I ran her for coal to Lexington. I was on the Tom Brierly at Weston 2 or 3 seasons; then I ran the ferry-boat at Kansas City after that; then I went on a stern-wheel & run her for one season in the coal trade from Lexington to Kansas City. The next boat I run was at the bridge at Kansas City; I believe this was the time I run this ferry-boat. I was boating Texas cattle and railroad iron for the Fort Scott road from Harlem to the stock-yards.

Q. State, if you know, where the bridge is located at Kansas City.

A. It is located just above the steamboat landing, five or six hundred feet.

Q. State if you know the channel & how the current runs above the bridge & through the bridge.

405 A. The channel through the bridge runs nearly east and west and it makes a gradual bend southwest as you go up the stream.

Q. How far up above the bridge does the turn take place in the current?

A. I suppose it is some 5 or 600 feet.

Q. What is the direction of the current above that for some distance?

A. This bend? It runs down northeast direction 5 or 600 feet above the bridge; the river is running nearly a northeast direction.

*Words in brackets excluded because leading & contradictory of answer.

Q. Now, state if you acted as pilot on that portion of the river whilst they were building the bridge.

A. I think I was boating nearly all the time when they were building the bridge.

Q. State if you have had any experience in running the piers of the bridge.

A. I was through every one of them.

Q. Which did you run between?

A. They usually run the south side, but I wouldn't care what one I took.

Q. That is between what piers?

A. That is between No. 1 and No. 2.

Q. Has No. 2 any name besides this number?

A. That is the round or pivot pier.

Q. Between the pivot pier and pier No. 3, have you run between them?

A. Yes, sir; I can't tell how many times. I have been through a good many times, and during the time they were building the Howe trusses I towed lumber with barges with the Hattie Wheeler; sometimes I would have to go up one side and go down the other.

Q. State how high the piers were then.

406 A. The piers were all done; this was while they were putting up the trusses.

Q. Will you state, if you know, the depth of water in the north & south draw?

A. We sounded it there; I think the last water we found in the south draw was 20 feet; it was about opposite of the point of the draw rest. I can't remember when these soundings were made; it must have been a couple of years ago; it was while they were redecking the bridge; it was after the accident to the Alice.

Q. State if you had any knowledge of the depth of the water before that.

A. Yes, sir; there has always been high water. I done the first sounding that was ever done at the bridge.

Q. Tell the jury how deep it was along there.

A. I don't think we found over 32 feet of water—that is, about where this pivot pier is. I don't remember of finding any more water than that.

Q. Tell the jury about the depth of water at pier No. 1.

WITNESS: These soundings were taken after the accident, perhaps the same spring of the year. I won't be positive about that; they were redecking the bridge at the time; they were speaking about the accident to the Alice while we were on the bridge.

Q. Go on now & tell the depth of the water in the two piers.

A. The least water we found in the south side was 20 feet;

407 that was in towards the shore, and, if I remember, then it run out to about 22 feet at the draw rest, and at pier No. 1 it was about 21 feet; at the pivot pier between 33 & 25 feet. It gradually deepened from pivot pier & struck 42 feet of water just below No. 3.

Q. Now, state if there was any bar on the north side of the draw

rest; and, if so, what distance it was at the time of the accident to the Alice.

A. The closest bar is at right angles, and that is about 500 feet.

Q. Now, state the depth of water between the upper draw rest & this bar.

A. I can hardly remember; I think it was from 23 feet down to 10 or 15 feet; pretty close up. I think it was 23 feet on the north side of this draw rest; we sounded over pretty close to the bar; I think it was 15 feet.

Q. Now, state if you saw the accident to the Alice; and, if so, at what point you were, and describe how it occurred.

A. The time the accident occurred to the Alice I was on the north side of the river, about 500 feet from where she struck, in company with two others—Jones and Ingalls were with me. The river at that time was full of ice on the south side, which extended out as far as this draw rest; this was old ice.

Q. Tell about the size of the cakes.

A. They were from the size of your fist to 10 or 12 feet & about 12 inches thick.

Q. Tell the jury what you mean by old ice.

408 A. It is ice that has frozen up during the winter. It is solid ice.

Q. Now, describe, if you saw the Alice coming down the river before the accident; &, if so, whereabouts in the river she was & how she approached the bridge.

A. When I first noticed the Alice she was up the river perhaps one-half of a mile. I noticed she was on the north side of the ice, and she came down on the north side, & from the way she was running I supposed she was going through the north side of the draw, but when she got down within 300 feet of the draw rest she turned in the ice; she turned southeast.

Q. State how fast she was running when you first observed her.

A. She was running slow when I first noticed, & continued till she turned into this ice; when they turned they belched her—that is, — her a full stroke.

Q. State how she was headed before she turned into the ice.

A. Just about before she made the turn she was running nearly an easterly direction; she would just about have missed breakwater on the north side if she had kept on; she was running about right to have kept through on the north side.

Q. I'll ask you if, in your judgment as a pilot, *if* that was the proper way to come down on the north side of that floating

409 ice and in a short distance attempt to go on the south line?

A. I wouldn't have attempted to have gone in the ice at all. I would have kept on the outside of the ice. Under the circumstances I think that would have been the best course. There was nothing on the north side to have prevented the boat from going through in safety. There is plenty of room there like there is on the other side.

Q. Do you recollect the pontoons that were on the south side of the river?

A. I recollect of seeing them there.
Q. Do you recollect how they were fastened?
A. They were fastened with a wire cable to a big rock.

(Chanute's map shown witness.)

Q. Do you recollect how far pier No. 1 stood out in the water?
A. I think it stands out about 20 feet from the rock bank. I-depends on the stage of water; sometimes it is out 20 feet; when the water is low there is not any water in there at all.
Q. Do you know how many pontoons there were?
A. I think I remember of seeing them there often.
Q. Do you recollect of their being affected by the ice that spring?
A. I remember of seeing them pushed out on the ice. The ice had gorged under them and pushed them up. They were sitting up high on the ice.

Q. Can you state if they caused any cross-current at the
410 time of the accident—the time of the accident to the Alice?

A. No, sir; they couldn't have caused any cross-current.
Q. Do you recollect of their being taken out; &, if so, when?
A. I remember of taking some out, but I don't know that I can give you the time. One Sunday I went over there with a skiff & I saw them pulling them out with an engine. They could not get at them very well and I took the boat & helped them make the ropes fast. The engine was on the Missouri Pacific railroad track. I don't know who the engineer was. I fastened the ropes for them & got them out. That was on Sunday.
Q. Now, about what time in the year was this?
A. This was in the spring of the year.
Q. How long after the accident to the Alice?
A. I can't state the exact time.
Q. Was it the same spring?
A. It might have been the same spring. I don't think it was a great while after the accident.
Q. Do you recollect the date of the accident to the Alice?
A. It was in March, 1874.
Q. Was that about the time of the accident?
A. It was in 1874. I know the river hadn't been broke up but a few days. The river had only been broken up about a week before the accident to the Alice. The ice put the pontoons out of position.
Q. Will you describe about how many of these pontoons were pulled out?

411 A. I think we pulled out 3 that morning.

Q. What was done with the wreck?
A. Mr. Wise gave me all the lumber I wanted; the people around there got all they wanted of it; some of it floated off down the river.
Q. State how much of these pontoons you pulled out.
A. We pulled out all we could see; there was a part of the bottom of one above pier No. 1; pulled out all of it we could. Wise said that ended the barge business and he was glad of it; there was none left in there that I know of; we pulled out all we could see, except part of one; we pulled out three altogether.

Cross-examination:

Q. You say you have been a pilot for ten years?

A. Yes, sir; I never had a license as a pilot; there was another man that had the license to run that boat.

Q. Have you ever testified before in this case?

A. I believe I did once or twice; I don't remember how many times.

Q. You say you saw these pontoons on the ice & then you saw them taken out?

A. Yes, sir.

Q. Did you testify on the second trial of this case as follows:

Q. You think you took these soundings the same spring?

A. I think it was.

Q. Did you testify on the second trial that the soundings were taken 12 months after.

412 A. I don't remember.

Q. Did you testify on the third trial that it was the succeeding summer?

A. I don't think it was 12 months; I don't know whether I testified it was 12 months of not.

Q. Well, you know, in regard to the pontoon, did you testify on the second trial as follows:

"I don't recollect anything about the pontoons after they were sunk."

A. I had reference to the accident to the Alice.

Q. Was that your testimony, that you didn't know anything about their being sunk?

A. I don't know about that; I know I helped to pull them out at the time of the accident to the Alice; I knew nothing about the barges; they — right upon — top of the ice when I saw them, with the exception of one; I think it was three we took out; we pulled them under the bridge; we pulled them all to pieces; there was a good part went down the river.

Q. You didn't just loosen them & let the whole barge float off?

A. There wasn't a whole side of one left; I think I got about three wagon loads of the lumber.

Q. You saw this boat coming down; how far were you standing from the head of the draw rest?

A. I was standing about 500 feet north of the draw rest; the first—

413 I saw the boat she was about one-quarter of a mile away, about opposite of the first pork-house—I mean the lower one.

Q. From where you stood you could see she was on the north side of the river?

A. Yes, sir.

Q. You say she came along down until at 300 feet above the nose of the draw rest; she was going about east and she was north of it?

A. She would have went through the north draw if she had kept on.

Q. That was the time she started to change her course?
A. She was about 300 feet above.
Q. She wasn't 40 rods above?
A. I have nothing to say about the 40 rods. I said it was 300 feet. My judgment is that is 300 feet; if 30 or 40 rods is 300 feet, then it is that.
Q. Will you swear that it wasn't over 600 feet?
A. I am swearing that it was about 300 feet; of course, she wasn't 600 feet when she started in there.
Q. How far is the shore from the head of the draw rest, in a northwest direction?
A. It is owing to what angle you would take northwest; it would be about 700 feet. At the time of the accident there was deep water all through there.

(O'Flaherty's map shown witness.)

Q. Is that a pretty correct representation of the direction the sand bar takes?

A. The shore over there looks about like it. There is a
414 reef about one quarter or half mile above the bridge.

Q. When you first saw the boat she was opposite *of* the packing-house?

(Witness shows on the map where boat was.)

Q. You say when he turned his boat in there he belched her. Do you know what belching means?
A. I do.
Q. You say she struck the nose of the draw rest?
A. She struck on the south side of it; she struck forward of her wheel a little; she was in a southeast direction when she struck.
Q. How long was this boat?
A. I have heard them say she was 200 feet.
Q. Now, you say she was on the north side of the draw rest and running for the north draw, at 300 feet above?
A. She would have gone through it if they had not stopped.
Q. You say that he turned her to the southeast and started into the heavy mass of ice, and then the boat came down so that she struck the southwest corner.
A. He got into that ice and his power wasn't quick enough, and of course she struck it. If there had been no ice he would have gone on it.
Q. How fast is the current there?
A. There is 3 or four miles per hour there. At certain stages of water it is more than that. I don't think it is exceeding four miles per hour. It is hardly ten in the June rise. That is my judgment as a pilot.

415 Q. Do you think he could have taken the boat off that side & turned her 300 feet above if there had been no ice?

A. No, sir; the boat was running on a slow bell. I don't remember whether I said she was running five miles per hour or not; my judgment is that if there had been no ice she could have gone in

there without breaking her back on the draw rest. I have handled boats as big as the Alice. I have handled the steamboat Emily. I was not the regular pilot. The pilot would go down-stairs and leave me in charge of it. I could have taken the Alice through there if she was not loaded too heavy.

Q. It is your opinion that these five pontoons wouldn't have made a cross-current?

A. I don't think they could. I have seen steamboats since & they didn't make a cross-current. It would be impossible for them to make a cross-current; the water would just have run around them.

Q. I understand you to say that in low water it is dry ground inside of pier No. 1?

A. In very low water I don't know of any sand bar in there.

Re-direct examination:

Q. I'll get you to explain about the water running around the pontoons. Supposing it was deep enough to cover them, how would it be?

A. The water would go right around them. When the water is deep enough to cover them we wouldn't know there were any. They have got to be very near the surface to make any break.

416 Q. I believe you heard Vaughan testify where he stood when he saw the Alice come down?

A. The last trial before this I did.

Q. Do you know where his office was?

A. His office is some 300 feet below the bridge; somewheres there; I can't state exactly.

Q. Now, assuming that he walked out in front of his office on the bank of the river when the Alice was coming down and looked up the river to the north of pier No. 1, could he see the boat if she was coming down hugging the shore?

A. No, sir; if he looked to the north side of pier No. 1 she would be too far to the shore. He could not see up one half mile above the bridge. They would be in the point of the bank is why I think he could not see her. The river runs southwest. It goes east till it passes a bridge a little and then it goes southwest; that forms the bend.

Q. What is there to obstruct his view, supposing he did not look on the north side of pier No. 1?

A. He could not see around the bend by looking north of pier No. 1.

Q. State to the jury about how far out in the river the boat was, assuming he looked to the north of pier No. 1?

A. She must have been a good ways over, just about ready to strike; she must have been a good way over to the north side.

Q. Will you describe to the jury what kind of ground there is from the bridge up for some distance?

A. A high bluff; it is natural rock.

Q. About how high up to the top of the bluff?

417 A. It is as high up as this ceiling (feet).

Q. How far up above the bridge does this bluff extend?

A. That extends all the way around the bend, the way the wagon road goes; it is all high land there.

Q. How far above the bridge does it commence to curve southwest?

A. Between five & six hundred feet.

Q. And then what is the direction of the bluff up the river?

A. It turns in a southwest direction.

Q. Will you state how high the bridge is above the water & above the Missouri Pacific track?

A. I could hardly tell; I suppose it is about 15 feet above; the wagon road runs under it; I mean the Pacific track; it runs under the bridge.

Q. Suppose he looked on the south side of pier No. 1 up the river, could he see the boat if she were on the Kansas City shore when she was from one quarter to a half mile above the bridge?

A. She would be in that bend at that distance and he could only see her stacks.

Cross-examined:

Q. Have you stood at that point and looked up the river?

A. Yes, sir.

Q. Did you do it at the request of Mr. Carr?

A. I don't think I did.

Q. Then you are familiar with that view up the bridge; you are familiar with the view of the current of the river there?

A. Yes, sir.

418 Q. Do you know where the Fort Scott machine shops are?

A. Yes, sir.

Q. Do you know that you can stand there and look up the river & see clear water to the Fort Scott shops in the bend?

A. I don't know.

Q. Between what piers would you look to see the packing-house?

A. I never looked at them.

Q. I'll ask you if you can't see the entire channel of the river as far south as that point where Vaughan stood to the Fort Scott machine shop?

A. You can see the water but not the boat; she is in the bend. (Witness shown Fallet's & Marvin's city map.) This map is not correct.

Q. I'll ask you if you can see the clear water from the point where you say you stood to the Fort Scott shops?

A. I never looked up to the shops.

Q. Is the place where Vaughan stood at the same elevation of the Pacific track?

A. It is lower down; Vaughan stated he stood a couple of feet from the river bank.

Q. Ain't that the same height of the track?

A. It is my impression that it is not.

Q. The Pacific railroad track runs right up the bank?

A. Yes, sir.

Q. Do you know whether you can't look right up that track & see the Union elevator?

A. I never noticed it there; I have watched boats often coming down there. I have been right there a hundred times and
419 seen them come down. I have stood on the ferry landing, and that is still farther north. I don't know that I every stood more than once or twice where Vaughan stood. I have seen them in the bend when I thought the boats had landed, & I would see them come out after awhile. The ferry landing is a little below the foot of Main street; it is about 20 yards below Main street.

Q. Do you know how high the bank is?

A. I can't state how high the bank is. I have no idea how high the bank is.

Q. How high is the bank above the water?

A. I can't say how high it is. I suppose it might have been 8 or 9 feet down to the water.

Q. Did you ever stand at that place & see a steamboat coming down?

A. I might have been there.

Q. Were you ever there.

A. I can't state that — ever stood right in that place and seen a boat coming down. I have stood on that levee a good many times.

Q. Isn't the levee lower than where Vaughan stood?

A. It might be a little lower.

Q. Isn't there a perpendicular bank in front of Vaughan's warehouse?

A. There is a perpendicular bank there; it is not 15 feet high: I think it is about 8 feet there. I don't think that point is higher than the railroad. I think it is about the same as the railroad. The railroad runs right up the road.

420 Q. I'll ask you if you can't look right up north of the shore pier and see the Union elevator to the north of the shore pier?

A. I don't know about the Union elevator, but I know the boats go out of sight. I have stood on the levee and seen them go out of sight; I have stood on the ferry-boat & seen them go out of sight.

Q. Did you ever stand where Vaughan stood and see one go out of sight?

A. I could not swear that I ever stood right on that spot.

Jones.

WILLIS JONES, being produced and sworn on the part of the defendant, testified as follows:

Q. State to the jury where you reside.

A. In Kansas City.

Q. State to the jury if you saw the Alice strike the upper draw rest of the bridge.

A. I saw her when she struck.

Q. State where you were at the time she struck.

A. I was on the sand bar fishing. I was about 500 feet north of the draw rest. I was with Ledford and Ingles.

Q. Which direction from the draw rest were you?

A. I was north of the draw rest, at the sand bar.

Q. State if you observed the steamer coming down to the draw rest.

A. I saw her up the river coming down.

Q. How far up the river did you see her?

A. About one-fourth of a mile.

Q. State if there was any floating ice.

421 A. There was floating ice, lots of it, in the river all along the south bank; it was running full; she was on the north side of the ice coming down when I noticed her.

Q. State in regard to the extent of the ice in the south side of the draw at the time.

A. The south side was full & some in the north side.

Q. Describe to the jury the size of the cakes.

A. They was all sizes, from little, small pieces to large ones.

Q. About how thick?

A. I suppose six or eight inches thick; maybe more.

Q. With reference to the channel, state about the floating ice; to what extent it covered the channel.

A. The channel was running full.

Q. State which way the bow of the boat was headed when you saw her coming down?

A. From where I was I thought she was going down the north draw; she seemed to be headed for the north draw.

Q. Well, state if she changed her course at any time before she struck, & in what direction.

A. She came running down that way, & I thought she was going down the north draw. I saw her on the north side of the ice, and she came down that way till she got pretty close to the ice-breaker, & then she turned in a southeast course to go in the other

422 draw; she was about 300 feet above when she commenced to turn in; she might not have been as much as that.

Q. State the speed she was running.

A. I think she was running pretty slow till she turned into the ice & then she went faster.

Q. State to what extent she increased her speed.

A. She worked her wheels a good deal faster; she went faster than she was before.

Q. Did you notice when she struck; what part of the boat?

A. Her wheel struck; it knocked her wheel off.

Q. Was there anything to have prevented her from going through the north side of the draw?

A. Not that I know of.

Q. Do you know anything about the pontoons?

A. I don't remember anything about the pontoons.

Cross-examination:

Q. You & Ingles and Ledford were fishing there?
A. Yes, sir.
Q. Were you partners?
A. Yes, sir.
Q. When you first saw this boat she was opposite of the Fort Scott shops?
A. She was up about a quarter of a mile.
Q. Did you ever state that she was opposite of the Fort Scott shops?
A. I don't think I did; I won't be certain.
423 Q. How many times have you testified in this case before?
A. Some three or four times; I think this is the fourth time.
Q. You were standing on the sand bar?
A. I was.
Q. You were able to see the position of the boat, with reference to the ice?
A. I could. I could see she was on the north side of the ice; I could see her from where I was standing.
Q. You say she was headed like she was going through the north draw?
A. That is the way I thought she was going.
Q. Did she change her course?
A. She had to change her course coming around that bend; she was headed about southeast and she was on the north side of the ice.
Q. You say she was headed like she was going through the north draw & was headed southeast. What direction was she from you?
A. She was southwest from me; it seemed to me she was going through the north draw, because she was so far out.
Q. You say she got close to the head of the draw rest?
A. I should say about 300 feet.
Q. Who was the first agent of the bridge company that you talked to about this case?
A. I think Mr. Wise.
Q. How soon after this accident?
A. I don't remember how soon.
Q. About how soon?
424 A. It might have been shortly after; I think it was before the suit was brought. He said there would be a lawsuit either at Jefferson City or St. Louis.
Q. Where is Ingles?
A. He is out in Kansas; he has been there for a couple of years.
Q. Whereabouts?
A. In Ottawa, Kansas.
Q. Has he ever been a witness in this case?
A. No, sir; I think not.
Q. How long had you been fishing there before that?
A. I don't remember whether that was the first day we had been out or not.

Q. Have you ever worked for the bridge company?
A. Yes, sir; I helped put down flooring on the bridge.
Q. When?
A. I don't know; I think it was the same summer that the Alice bu-sted. I don't remember whether it was before or after.
Q. Did Ledford work there with you?
A. Yes, sir; he was there, too.
Q. You suppose the ice might have been six inches thick?
A. I was close to it; I didn't measure. I looked to see what was the thickness of the ice.
Q. Every time that you look at the ice you make up your mind how thick it is?
A. I just look at it.
425 Q. Was your attention called any more to it that day than any other time?
A. I don't know that it was; I would be pretty certain to know it when I saw it.
Q. You can't remember whether you was fishing the day before?
A. I wouldn't be certain what made me remember; this was on account of the Alice striking. I did not tell Mr. Wise what I was going to testify to, nor to anybody.

W. J. Huckett.

W. J. HUCKETT, being produced & sworn on the part of the defendant, testified as follows:

Q. Where do you reside?
A. In Kansas City.
Q. Were you in the employ of the defendant on the 4th of March, 1874; and, if so, in what capacity?
A. Yes, sir; engineer of the draw of the bridge. There was two engineers; Jerry Fountain was the other one.
Q. State if you were at the bridge at the time the Alice struck the upper draw rest.
A. I was at the south end of the bridge.
Q. What time of the day did she strike?
A. Half past eleven.
Q. Will you state if there was any floating ice in the channel that day; & if so, to what extent?
A. The south part of the draw was full, and a little running in the north.
Q. Describe to the jury the size of the cakes of ice.
426 A. There was small & large; it was what we call old Missouri river ice; it might be six, eight, or ten inches thick.
Q. State if there was any of the floating ice running through the draw side of the draw.
A. Very little.
Q. State if there was anything to prevent the Alice from running through the north side of the draw.
A. There was not.

Q. State if there is any sand bar on the north side of the bridge, & what is the distance?

A. There is; about 500 feet.

Q. State now in regard to the pontoons.

A. There was six pontoons in the first place.

Q. State if anything occurred to lessen that number prior to that.

A. They was jammed upon the bank at one time.

Q. How long before?

A. That was in 1873, and one was crippled up so that we could not put it back; & left it about half under the bridge. I could stand on the bridge & see men pulling it to pieces. The other five were put back in the water.

Q. In what position were the other five put back?

A. I think that when we put them back together we floated them together. They were in a direct line from pier No. 1 to the *cubal* in the bank.

427 Q. Now state if anything occurred to put them out of position before the accident to the Alice.

A. I don't know the time of the month that was; it was in the spring. The ice came down & shoved them all up on the bank high & dry.

Q. How long was that before the accident to the Alice?

A. I can hardly state; it might have been three or four days before.

Q. Will you state to the jury if these pontoons were in sight at the time of the accident to the Alice?

A. They were on the bank there.

Q. State if these pontoons were removed at any time after the accident.

A. The bridgemen—that is, the repairers of the road and bridges—and, I think, two of the men from the bridge was taken one day. I did not go down myself. I think my assistant was down and Jerry Fountain. I had put jacks under them & lowered them down & slid them in the water.

Q. I speak now of when they were pulled out. State if they were pulled out after the accident & when it was they were pulled out.

A. I don't remember the time they were pulled out; I remember of seeing the engineer & men at work at it—the Hannibal engine-r; I think it was Sunday they got the use of the Pacific track to pull them out; I know they got all they said they could get out; I don't know how ma-y were taken out; Wise said they took out all they could.

428 Q. State how soon this was after the accident.

A. I don't know whether it was done that summer or not; I think it was.

Q. With reference to the June rise, *is* you can?

A. It was before the June rise of the same year in which the accident to the Alice was.

Q. Will you state if the pontoons at the time of the accident to the Alice created any cross-current to the head of the draw rest?

A. No, sir.

Q. State if there was any current about the pontoons at any point; &, if so, describe it.

A. The curve of the river makes out in there & makes a current above the pontoons; about 150 feet it runs out there, & then the river commences the curve, and as the water goes out it makes a little eddy there; that is about 150 feet above the pontoons; it don't amount to anything; that has always been there; people have stood there to catch drift-wood.

Q. State what the distance is, if any, in the current before & after the accident.

A. I don't see any difference at the present time.

Q. Will you state who the engineer was who pulled out the pontoons?

A. I don't know his name.

Q. Are you connected with defendant any way now?

A. No, sir; nor haven't been for about three years.

Q. Will you state if you saw the accident to the St. Luke in the September following?

A. I did.

429 Q. Describe where you were at the time.

A. I was on the draw running the engine; they had whistled for me in the bend to open the draw for them to go through; they whistled about Plankington & Ornior's; that is probably 2,000 feet above; they whistled at different points when they got ready to go through.

Q. And you opened the draw?

A. Yes, sir.

Q. What time of day was it?

A. About half past seven in the evening; we had just lit the lamps and put them up.

Q. About what stage was the water?

A. It was probably about 8 feet above low water.

Q. Did you observe the boat come down?

A. Yes, sir.

Q. State which way she was headed, which side of the channel she was on, & how she was headed.

A. She was headed right directly for the draw rest, coming down.

Q. State if she changed her course at any time; and, if so, in what direction.

A. Just before she got to the draw rest, about 600 feet above, she turned to go into the south draw.

Q. What part of her struck?

A. The wheel-house—the larboard side.

Q. Was there anything to have prevented her from going through the north side?

A. No, sir.

Q. State if there was any current at time the St. Luke struck different from the ordinary current in the river.

A. About the same; I don't see any difference.

Cross-examined:

430 Q. Do you say now that the pontoons were on the bank high and dry when the Alice struck?

A. Yes, sir.

Q. I'll get you to turn back to your testimony, "The lower part of the five was under the water." How came you to state that the five was under water and one on the bank.

A. I made a mistake; I remember distinctly now; I remember of swearing that five of them were under water; I remember I made a mistake then.

Q. How long ago was that; was that past a year ago?

A. I believe it is.

Q. Have you made that mistake more than once swearing in this case? How many times do you remember of making that kind of mistake?

A. I don't know.

Q. Now, you say the boat came down to within about 600 feet of the head of the draw rest when she turned.

A. Yes, sir.

Q. What makes you think it was 600 feet?

A. I should judge it was about 600 feet. It is very hard to tell the distance upon the bridge; the last time I stated she was 300 feet from the draw rest when she turned in, and on the first trial I testified she was 1,000 feet from the draw rest when she turned in. If I kept inside of 1,000 feet I would be all right. It was about 600 feet.

Q. Now, I'll get you to state from what direction that boat was was coming.

431 A. She was going east—she was coming about east. The river runs there a little northeast.

Q. And from above there what direction did she follow?

A. She followed a direct course right down the river, and she kept a straight course till she made this change. I saw her about two thousand yards up. I said they whistled about 2,000 yards up. We got the draw open. We began to look up for the boat.. She was not but a short distance above the bridge. I don't know the exact distance. I don't know how long I watched her. I watched her till she struck. I watched her till she got to the draw rest. The boat was about 600 feet above the draw rest when she turned in. I had been looking at her for five or six minutes. She came northeast when I first saw her. I was looking at her 1,000 feet above. After we got the draw open we could look through and see the stacks. We might have been watching her 5 or 6 minutes. During all that time I had her in sight through the bridge, antl she didn't change her course in that time. I could not say what her speed was. Some boats go through like a streak, going through there. Sometimes a boat goes down there very slow. We always saw the boat five or six minutes before they got there. I could tell for that distance which way she was headed. I could not tell exactly when she would strike.

Redirect:

432 It is my judgment that she was about 600 feet above the draw rest when she turned in.

Mullen.

J. P. MULLEN, being produced and sworn on the part of defendant, testified as follows:

Q. State where you reside.
A. Kansas City.
Q. Were you residing there at the time of the accident to the Alice?
A. Yes, sir.
Q. Did you see the accident?
A. I did. I was on the bridge. I was standing on pier No. 1, next to the draw.
Q. State if there was any ice floating in the river.
A. Yes, sir; the channel was full on the south side. I mean the draw in the south side was full.
Q. Describe the size of the cakes of ice.
A. The ice, I think, was from six to eight inches thick.
Q. How large were the cakes?
A. The cakes were pretty large; they were all sizes.
Q. State to the jury how the boat cam e down, with reference to the ice, before she struck the draw rest.
A. Her bow was headed north.
Q. Tell the jury how the boat came down, with reference to the ice.
A. She was coming down on the north side of the floating ice?
Q. How far up the river did you observe her?
A. I think she was somewhere opposite of the Fort Scott machine shops in the bend when I first saw her.
Q. How far up the river is that?
433 A. Possibly ¼ of a mile.
Q. State to the jury how her bow was headed just before she turned into the floating ice.
A. Her bow was headed north; I think, from the appearance when I was on the bridge, she was headed for the north draw.
Q. About how far did she change her course?
A. She changed her course 350 or 400 feet above the draw rest; she changed to the southeast.

Cross-examination:

She was running north, her bow to the north-northeast.
Q. Did she change her course?
A. Principally her bow was to the north. I think she was trying to keep out of the ice. I am sure she was running northeast, about pretty well north. She had been running in the same course about as when I first saw her. That was probably this side of the Fort Scott shops a little.

Q. Where was her bow when her wheel struck the draw rest?
A. Her bow was southeast then, running in the draw.
Q. How far from pier No. 1?
A. I could not tell the distance. I seen her when she turned and I was looking around to see what was going on and her wheel was off. She was going in between the piers then.
Q. Was her bow pretty close to pier No. 1 when she struck?
A. I could not tell you about that.
Q. Didn't you tell that when you testified about it?
434 A. I could not tell about that. Her bow was southeast of the resting pier when she struck.
Q. How was it from pier No. 1?
A. I don't know. I didn't take any notice of that?
Q. Didn't you testify six months ago that her bow was pretty close to pier No. 1 when she struck?
A. I don't know about that.
Q. How far did she get north of a line of the draw rest when they made this turn?
A. She got within 350 feet when she commenced to turn; she was north of the draw rest; her bow was north of the head of the draw rest 350 or 400 feet above; I mean the boat was.
Q. Which way was the boat, north or west of the draw rest, when she turned?
A. She was north before she made her turn and she turned southeast.
Q. How far north?
A. The boat was 350 feet above the draw rest.
Q. Which way does the river run there?
A. About northeast.
Q. Then she was over to the Clay county side of the draw rest?
A. Yes.
Q. And when she struck her bow was between the piers?
A. I didn't take any particular notice of her bow after she turned.
Q. Did you take any notice of the boat at all?
A. I did. I took particular notice that she was going to strike before she got there. I took notice of her turning & changing & going in that direction. She turned 350 or 400 feet above. I
435 don't know how close she could get to the Clay county side. She was hugging the sand bar pretty close—that is, the Clay county shore.

(Chanute's map shown; witness shows on map how boat came down the river.)

Redirect examination:

(Shown map No. 4.) She run close up to the sand bar shown on the map and then turned southeast.

THEODORE REYNOLDS, being produced and sworn on the part of defendant, testified as follows:

Q. State where you reside.
A. In Kansas City.
Q. State what your occupation is.
A. Locomotive engineer.
Q. State if you are in the employ of the defendant at the present time.
A. No, sir.
Q. State if you were in the employ of the defendant in the spring of 1874.
A. I was.
Q. In what capacity?
A. As locomotive engineer.
Q. State if you had anything to do with pulling pontoons out; and, if so, when it was and what part you performed in the matter.
A. About the last of May we took an engine on our road down the Pacific track—that was in May, 1874—and went down there and stood on the lower side of the bridge on the Pacific track and commenced at pier No. 1, where the barge was fastened, and pulled down there and drew the two upper ones to pieces.

436 Q. State how much of the two upper ones you drew out.
A. I could not tell; we drew them to pieces; they claimed it was sufficient. I did not go down to examine them. I was the man that had charge of the engine that pulled them out.
Q. State to the jury if you got the three out entirely.
A. I should say that we pulled them out as far as I know. I did not examine them to see whether they were all pulled out or not, and the two upper ones that had been partly torn to pieces, and we pulled out all we could, and the bottom was sunk in the sand so we could not get all of them.

Cross-examination:

Q. How do you know that it was in the year 1874?
A. I know it was in 1874. I know it was done when Miller was civil engineer.
Q. How do you know it was done in 1874?
A. I know I was running an engine in 1874. I have been running an engine since 1870.
Q. I'll ask you how you know it was in 1874 instead of 1875?
A. I know it was after this accident. We pulled them out while the water was low, so that we could get at them. My time-book will fix the date. I haven't got it here. I suppose the company has got it. I know it was on Sunday in May, 1874.
Q. You have never been a witness here before?
A. No, sir.

437 Q. When you were pulling there you say you took that engine down below the pier?
A. Yes; on the Pacific track. I had nothing to do but to run the engine; I had nothing to do with the management of the pontoons; all I attended to was the engine.
Q. How do you know there was just three pulled out?
A. I don't. We pulled the three out and pulled the others out

all we could. We pulled them down the stream—down to the shore. We pulled them right to the edge of the shore. I know we tore some to pieces. I don't swear that I pulled them upon the bank; I say we pulled them upon the shore.

PETER SMITH, being produced and sworn on the part of the defendant, testified as follows:

Q. State where you reside.
A. In Quincy, Ills.
Q. What is your profession?
A. I am civil engineer.
Q. How long have you been engaged in that profession?
A. For about 30 years.
Q. State if you are in the employ of the defendant at the present time.
A. I am not; I was in the employ of the defendant from November, 1874, until last of March, 1877, in the capacity of general engineer of the road.
Q. State if you had charge of the Kansas City bridge.
A. I had general supervision of it and general charge.
438 Q. State if you had occasion to examine the channel of the bridge and above the bridge.
A. I did in December, 1874. I made a survey of the channel getting the shape of the channel above and below the bridge, as far as I thought it necessary.
Q. State the distance from the pivot pier to the nose of the upper draw rest.
A. I don't recollect it exactly; it is about 200 feet.
Q. State if the drawbridge, as swung upon, if it covers the whole of it.
A. It leaves about 20 feet not covered with reference to the currents; it would be impossible to build a bridge that would be parallel with the current at all stages of water. They are built so as to be parallel with the current at certain stages of water, but in a low stage of water the current does not run parallel with it; when there is 15 or 20 feet it is oblique in a different direction. In a medium stage of water the main current would be parallel with the piers.
Q. Go on and describe the shore and the bottom for some distance—the conformation of the shore.
A. Standing on the south bank of the river, 2,000 feet up, the bank curves to the left till it gets within 1,000 feet above the bridge, and then the curvature changes and it curves gradually to the southeast. My view of it is that from leaving right there then the current takes a straight shoot for the pivot pier owing to the bank above there, commencing 1,500 feet above the bridge and
439 coming down to 1,000 feet of the bridge. That straight bank shoots the stream to the draw rest. It is about 1,000 feet above where the current commences to strike out.
Q. Will you state about the force of the current created by this deflection at an ordinary stage of water?

A. I can give you no idea of the force the current is accelerated; the current is more rapid than it would be.

Q. State if that would have any effect on a boat in flanking a boat.

A. I should think it would have considerable effect in flanking a boat. The boat must run in the direction of the current passing through the bridge; as it is at present you must run with the current.

Q. How would that be with reference to this upper draw rest?

A. It would have a tendency to throw it on the draw rest.

Q. Describe what kind of a shore it is from the bridge up.

A. There is rock presents itself all the way from 500 or 600 feet below the bridge to a point 1,200 or 1,500 feet above the bridge.

Q. Now, west of that point (shows on map) what kind of a formation is it?

A. It is an alluvial formation.

Q. What distance from the bridge up does the rocky formation terminate?

A. About 1,500 or 1,600 feet.

Q. What is the elevation along that portion of the bank?

440 A. The bank is some higher above & up to this 1,600 feet than it is below the bridge; from the bridge up the elevation increases some. The difference in the elevations would be about four feet at the bridge; the bank is 10 or 11 feet above low water. The Missouri-Pacific track is between the bluff & the river.

Q. How much higher is the bluff than the track?

A. Perhaps 80 feet—60 or 80 feet.

Q. Will you state if you have made any measurements or soundings of the depth of the water along above the bridge there; and, if so, when it was and the depth?

A. We took soundings in December, 1874. These soundings are given on this map, their position & depth reduced to low water.

Q. Will you give them to the jury?

A. I took soundings above the bridge, extending 2,000 feet above. At pier No. 2, on the south side, the depth is 17 feet—on the south side of the pivot pier, under the draw; on the north side it is 22 feet. In the centre of the south opening, under the draw, the depth would be 3 feet. At pier No. 1, right under the bridge, the depth would be 9 feet; under the centre span of the draw, on the north side, the depth would be 29 feet, and at pier No. 3 it would be 19 feet. At the head of the draw rest it is 24½ feet. Opposite of the centre of the north span of the draw it would be 7½ feet; opposite of pier No. 2 it would be 9 feet, and in

441 the centre of the span, between piers No. 2 and 3, it would be 4½ feet; opposite of the centre of the opening under the south end of the south draw the depth would be 12 feet, and on range with pier No. 1, and north of the draw rest, there would be no water in low water. Taking it 100 feet above that, in range with pier No. 1, there would be but one foot in a line of the centre of the south opening of the draw, and 100 feet above the draw rest there would be 12 feet in range with the draw rest, and

100 feet west of it the depth would be 24 feet, and at range with the centre of the north end of the draw it would be 4½ feet; in range with pier No. 2 and a- 100 feet above the draw rest it would be two feet; in range with the centre of the opening between 2 & 3 and 100 feet above it would be 4½ feet. From these soundings and observations from floating objects I got the direction of the current. Taking a point 1,000 feet above the bridge, on the south shore, and throwing an object in the water and let it flow, & it would strike the head of the draw rest in low stage of water. In medium stage it would — south of the end of the draw rest; it would likely strike the pivot pier.

Q. Will you describe what distance the sand bar is north of the upper draw rest?

A. It would be about 4 or 500 feet, taking in a northwest direction, in a medium stage of water. Due north it would be
442 about 500 feet.

Q. What is the closest point that the sand bar is to the draw rest?

A. In a stage of 6 or 8 feet I should judge it to be four or 500 feet; that would be due north or a little west of north; a little west of north would be the closest distance.

Q. I'll ask you if you know the *the* point where Vaughan stood & saw the boat coming down?

A. I know about where it is; I never made any close examination.

Q. Looking up the bridge & on the north side of pier No. 1, state if he could see the boat if she was hugging the Kansas City shore.

A. No, sir; it would throw the line of vision across to the sand bar.

Q. Looking under the bridge on the south side of pier No. 1, could he see the boat coming around the bend?

A. If she were in the regular channel I don't think the hull of the boat could be seen 1,600 feet above the bridge. I don't know whether the smoke-stacks could be seen; perhaps it could. I don't think the hull could.

Q. If the boat was standing out to the north side of the river could he see her then?

A. I should think so.

Cross-examined:

It would make some considerable difference as to where a man stood as to where he could see.

443 Q. Suppose a man standing at a point from three to 400 feet below the bridge where Vaughan stood, could you see clear water all the way up Santa Fee street?

A. A man could tell by the smoke-stacks & possibly he might see the hurricane deck. I suppose he could tell her course in the river; it is very possible he might see her hurricane deck.

Q. You say you were making observations of this channel from things you saw in this channel. When were these measurements made?

A. In December, 1874; this point is 1,000 feet above the bridge where the channel deflects it.

Q. I'll get you to examine these depths here (map shown witness) commencing at a point just below where the pontoons were fastened; I'll get you to state the depth of the water. Didn't you find low water by these pontoons?

A. Right off the shore 80 feet from the head of the pontoons I found one foot of water; it is shoal water all the way down from there. I find it shoal much more rapidly at the head of the pontoons than anywhere else and continues way down the pivot pier and pier No. 1 and below. WITNESS: At 5¼ feet of water an object thrown out 80 feet in the water would strike the draw rest.

Q. How often have you made these examinations?

A. Pretty much every time that I have been there since; probably 4 or 5 times in a year; the water was generally at a low stage.

444 Q. Have you ever noticed it when you didn't find the current striking that draw rest?

A. I have not; I have taken notice of it on many occasions.

Q. How much observation have you had in watching the formation of bars?

A. I have not noticed them only since I came on the Hannibal and St. Joe road; this sand bar on the north side is shifting; the sand bar slopes very gradually until — 100 feet of the head of the draw rest, when it drops down suddenly; it is very difficult to account for the changes that take place in the Missouri river.

Q. You say you have never made any observations of that current; that you couldn't see that transverse current striking the draw rest?

A. I have not.

Burke.

Captain SAMUEL BURKE, being produced & sworn on the part of the defendant, testified as follows:

Q. State where you reside.

A. Leavenworth, Kansas.

Q. State what your occupation is.

A. Pilot & captain on the Missouri & other rivers.

Q. State how long you have been engaged in steamboating.

A. 30 or 40 years; I commenced in 1832.

Q. State on what rivers you have been pilot and captain.

A. On the Ohio, Mississippi, and Missouri; I have been on the Missouri for the last 20 years.

445 Q. Do you know the point where the Kansas City bridge is located on the Missouri river?

A. Yes, sir.

Q. State if you have any experience in steamboating up & down that point.

A. I used to run a packet from Kansas City to Weston in connection with the Hannibal & St. Joseph railroad; I used to make daily trips for 8 or 10 years.

Q. Have you had any experience since the bridge has been built or the piers built?

A. Not much since then; have only been through a few times.

Q. Describe if there is any bend or current in the river from Wyandotte down to the bridge and the extent of the bend and the kind of shore on the south side.

A. There is a very large bend around from Wyandotte down to Kansas City, about two miles—the alluvial soil—until it strikes the bluff above the bridge it comes to the rocky shore.

Q. How far is that above the bridge?

A. It is probably between 4 or 500 yards.

Q. How far does that rocky shore extend, then, from above the bridge? State whether it extends down past the bridge.

A. It goes probably 200 yards below the bridge.

Q. State now which side of the river the channel is on.

A. The channel is down on the south side of the river.

Q. State what is the proper course for a boat descending the
446 river through the bridge—what is the proper course for a boat to pursue in regard to the current and channel.

A. I could better show that if I had a map. (Map shown witness; witness shows on the map the course he would pursue in coming down the river.) You have to hug the Kansas City shore; if you get out too far you would strike the head of the draw rest.

Q. State if the formation of the shore creates any current; and, if so, about how strong, and the effect that current has on a boat.

A. A number of years ago this rocky shore did not extend up as far as it does now; when it strikes this bend it deflects it out more; the shorter the bend is the more the deflection would be; this bend makes a perfect horse-shoe. The water leaves the south shore about 200 yards above the bridge; you can put a log in there 10 or 20 feet of this shore and when it is two miles below it is out on the other side of the river; that is the natural course of the Missouri river.

Q. At the ordinary stage of water if you let a piece of wood go in there would it strike the draw rest on the south pier?

A. It might not strike at all; it would be altogether owing to the stage of water where it would strike. At some stages of water it might strike the draw rest; it might at a medium stage of water; at a low stage of water it would go straight through the draw. The
447 current has no effect on a boat in high water; the pilot has to attend to that, unless you are in a hard cross-current, and then you have to make your preparations to watch them.

Q. State, from your knowledge of the current there, if it affects a boat any in descending it; and, if so, in what way.

A. Any bend of the Missouri you want to go close to the bend in the high stage of water you have to hug the shore close. In coming out of this bend you must hug this very close.

Q. What is the danger in passing through this place in that way?

A. There is danger of striking the draw rest. The current would have that effect if you go too close, and if you stand out too far you cannot get in in time. You might think you are all right and you might miss your calculation.

Q. How far above the bridge should a pilot commence to put his boat in proper shape to pass through the south side of the draw?

A. He ought to keep in the right place all the time. If you got out of shape you ought to commence 5 or 600 yards above the bridge.

Q. What is the effect if he didn't go close enough to that bend?

A. The effect would be he would be too far out and he would hit the draw rest. The natural current would bring him up to the
448 draw rest. The natural current from this bend would flank him over to this draw rest.

Q. Suppose he was only 300 feet above the upper draw rest and on a straight line with it, and then he suddenly turns his boat to the southeast, would you consider that proper piloting?

A. He might go through and he might not. I don't think it would be good piloting. If you are too far out and you attempt to go in, if you don't go in you will hit the head of this draw rest. The tendency of the boat would be to flank. You have to be far enough above to get your boat so that when you straighten down you will miss it. I suppose if she had been running outside of that ice and she had straightened in 4 or 500 yards she could have gone through?

Q. Is that the shortest distance you would place it?

A. You might hit it in less than that; you might hit it in 300 yards.

Q. State, if ice floating in the river, is it usual for a pilot to run his boat down in the floating ice?

A. When there is room to go outside he would run outside and get ahead of it. If there was any ice and he attempted to go in there would be danger.

Q. State to the jury if the pontoons had sunk in the position in which they were placed whether they could create a cross-current at that point or not.

449 A. I don't think they could.

Q. Why can't they create a cross-current?

A. It is slack water and there is nothing to create it. In some places the pontoons sinking might throw the water out some ways.

Q. I'll ask you if the pontoons could sink—whether they could—suppose they were fastened to the upper end, whether they could sink transversely.

A. I don't think light boats could in that current; if they had been loaded with stone they might. I don't think these pontoons could sink transversely to the current & stay there. I don't think they are heavy enough. These boats are light, and it is very doubtful whether they could get to the bottom before they would go down stream.

Q. What is the duty of pilots in descending the river in regard to noticing the current?

A. The Missouri is a peculiar kind of a river. The pilots generally stand a regular watch going up and coming back. The same pilot comes back that goes up.

Q. Suppose there is a cross-current, can he tell it better ascending or descending?

A. He would most likely discover it in ascending. You go slower and you have a better opportunity of discovering it going up; you feel it very quick.

Q. I believe you have stated that you have steamboated on the Mississippi.

450 A. On the Lower Mississippi, not on the Upper Mississippi. I have never steamboated above the mouth of the Missouri. I have traveled up as far as Hannibal.

Q. Will you state if there are any rafts that are rafted down the Missouri river past Kansas City?

The plaintiff, by its counsel, objected to the witness answering said question on the ground that the same was irrelevant. The court sustained said objection and refused to allow the witness to answer said question; to which ruling and decision of the court the defendant, by its attorney, at the time excepted.

Cross-examination:

Q. Most of your steamboating was done before the bridge was built?

A. Yes, sir.

Q. Up to what year?

A. 1860, '1, '2, '3, '4, & '5; I then left that portion of the river & went above.

Q. You say that in examining that map the bend don't look as big as your idea of it?

A. It don't look as big as the bend is.

Q. Don't you know that when you left the river the bend was greater than it is now; didn't you examine it enough to see that the shore of the river is straighter than it used to be?

A. It looks to me to be straighter.

Q. Do you know where Lykins' warehouse used to stand?

A. Yes, sir.

451 Q. Above that 80 or 100 yards, don't you know that before you left the river it had been cutting there so that it made a great deal bigger bend than there was—a sharper bight above the warehouse?

A. There was a sharp bight above the warehouse.

Q. At the time you quit the river it was still cutting away above—that is, it came down from Wyandotte and struck this shore straighter than it does now.

A. It has cut a good deal all the way from Wyandotte down.

Q. Do you know whether, at the time the river was cutting down the way it was when you left, *it* appeared to be any danger of the levee at Kansas City; was there any indication of any trouble there?

A. I don't think I ever saw any trouble of any kind down there—that is, by sand bars.

Q. You don't remember when the city done this work above Lykens' warehouse—when they filled it in there?

A. No, sir; I don't.

Q. You don't remember, then, whether there was apprehensions that the river cutting in that way the levee would be endangered?

A. I don't.

Q. Have you known Tebeau as a pilot?

A. Yes, sir.

Q. How long?

A. I expect 20 years.

Q. Have you been on boats with him.

A. Yes, sir.

Q. What kind of a pilot was he?

452 A. We always looked upon him as a good pilot.

Q. Did you hear Ledford, Mullins, and Jones testify to where that boat was when it turned?

A. Yes, sir.

Q. What is the rapidity of that channel when the water is about 7 or 8 feet?

A. 4 or 5 miles per hour.

Q. When it is 7 or 8 feet what is — rapidity of the channel?

A. I should judge about 6 or 8 miles per hour.

Q. You say you heard them testify. Now, supposing Tebeau had got his boat just where they say he had, within 300 feet of the draw rest and entirely north of it, & with her headed to go through the north draw, the boat under way and in that channel—I'll ask you if it is possible to turn her and get her back without striking her across the nose of the draw rest, in your opinion as a pilot?

A. I don't think she could make the turn unless she turned back. If she was out there and under way and she attempted to turn she would run against the head of the draw rest.

Q. You wouldn't want to undertake that?

A. I shouldn't think it good piloting.

Q. Don't you think a pilot would be crazy that would undertake such an operation as that?

A. He might do — and not be crazy. I don't think it would be good seamanship. It is my impression, if she was out that far and he was 300 feet of the draw rest and entirely north of it, I don't think he could make it.

453 Q. I'll get you to state who has the best opportunity of knowing whether the ice is affecting of a boat—a pilot or a fellow standing on the shore and looking at it.

A. I should think the pilot had.

Q. It is not difficult for a pilot to tell whether the ice is effecting the navigation?

A. No; any good pilot can tell.

Q. Do you know how long Tebeau has been up & down the river—what kind of boats he has been on?

A. He has always been on the regular Missouri river packets. He has handled as good boats as ever run on the river—him & I was on the Emigrant 20 years ago.

Q. What position did you occupy on the Emily?

A. I was captain and pilot.

Q. Did you ever hire a man by the name of Ledford?

A. No, sir; I did not.

Q. Was you in the habit of leaving the pilot-house and leaving your boat in the hands of strangers?

A. I had another pilot, and when I went out he took charge. I never left any strangers in charge of my boat.

Q. You say that a pilot in going up stream goes slower and would have a better chance of seeing a cross-current—that is, in the daytime; he could see better in the daytime than in the night?

A. Yes, sir.

Q. You don't undertake to say that a pilot could know every cross-current in coming up the draw?

A. Yes, sir.

454 Q. Supposing he is coming up there and headed towards the cross-current, could he know there was a cross-current there? Supposing he had occasion to head his boat in shore in that way, run against the cross-current, might he not get up there and not notice the cross-current and still there be one there?

A. I don't think a boat could go up there and be a strong cross-current there without seeing it.

Q. About this slack water?

A. There has always been slack water there. There might be some little sand bar there near the shore.

Q. Can you say that the water run down and washed the shore from the time the bridge was built? From what you know the current might have washed the shore right down there?

A. I made no observation.

Q. You don't know how the current had run between pier No. 1 and the shore if you were not there?

A. I passed there once when the pontoons were there.

Q. You did not navigate the river to know whether the current run between pier No. 1 and the shore or not?

A. I don't know.

Q. I believe you testified last time that you thought Tebeau might have gone up in the night, and that he might have gone up there & been in such a position that he could not feel the cross-current?

455 A. That would be owing to the position he was in; if his boat had run away from him he might have struck this cross-current in such a position as not to have felt it. He should have felt it more or less, but he might have missed it.

Redirect examination:

Q. If the cross-current had been strong enough to have flanked his boat over in ascending would he have felt it?

A. That is what I testified to; my impression is he would have felt it.

Q. Don't pilots miscalculate sometimes in distances in going over dangerous places.

A. The best pilots are mistaken; there would be no boats sunk if they had not been mistaken; Mr. Tebeau might have been a good pilot and made an error in judgement in passing through the south draw when he was too close to the upper draw rest.

Q. Do you know Bob Bailey?

A. Yes, sir.

Q. Do you — anything about his habits of drinking?

A. Could not answer that from what I know myself. I never was on a boat with him.

PETER SMITH, being recalled on the part of the defendant, testified as follows:

Q. Mr. Gage asked you some cross-questions on cross-examination which I did not observe; I want you to explain them—that is, in regard to the shallowness of the water along where the pontoons were placed. I'll ask you what, in your judgment, caused the shallowness of the water along there.

456 A. In my opinion the shallowness of the water in front of where the pontoons were placed is cause- by the shape of the shore line 1,000 feet above the bridge.

Q. I'll ask you if, in making the soundings in 1874, *if* you discovered any cross-current at the point where those pontoons had been.

A. There was no cross-current there at that time. I think I would have detected it if there had been one there.

Q. Was there any deflection of the current except the one caused by the shore to the draw rest.

A. There was not.

Cross-examination:

Q. You state as your opinion that the shallow water is caused by the point 15 1,600 feet ab-ve the bridge?

A. Yes, sir; my observation commenced in Dec., 1874.

Q. You didn't observe that bank to see whether it had made any change?

A. Up to that time I never made any observations.

Q. Do you know that — had been any change up there.

A. I do not. I merely gave my opinion of what would produce that state of things.

Q. Suppose that from the time of building that bridge, in 1868, down to 1874 there was a uniform straight current with no such deflection as you speak of down the south bank & under the bridge. Supposing the current flowed straight and deep up to the time these pontoons sunk, and that immediately on the sinking of the

457 pontoons that filled these, would that be the only change you know of that could cause the filling there?

A. If the change is as you describe it.

Q. Do you know of any fact of your own knowledge that caused the filling up between pier No. 1 and the shore and the sand bar that formed there; do you know of any change except the sinking of those pontoons?

A. Nothing except the sharpening of that bend up there. I don't know that it has been a sharpening up there, except from hearsay.

Q. Do you know of your own knowledge of any change in the conformation of the river except the sinking of the pontoons?

A. I don't know of the sinking of the pontoons.

Map.

Defendant here introduced map drawn by Peter Smith, which is correctly copied and attached here. This was all the evidence introduced by the defendant.

(Here follows diagram marked p. 457.)

JOSEPH E. TEBEAU, being recalled on the part of the plaintiff, testified as follows:

Q. Did you hear the testimony of Leadford, Jones, and Mullins as to the position of your boat on the north side of the river?
A. I did.
Q. You stated you have been a pilot a good many years?
A. I have.
Q. What boat have you been running this season?
A. The Gold Dust.
Q. What is her size?
458 A. She is the finest & longest boat I ever run in my life.
Q. Where do you understand Mullins to say you run the boat?
A. I couldn't understand where Mullins said we were, because he had us opposite of the sand bar. He said I was pointed north and run up to this bar, and then I turned southeast. That is the understanding I had of him.
Q. Where did Leadford have you?
A. He had me on the north side of the draw rest.

(Witness shows on map how he came down the river.)

Q. What is the current at the point; what is the rate of the current?
A. I never got the boat within 100 yards of that place.
Q. I ask you in regard to the rate of the current. What is the rate of the current there?
A. I should judge about that time the rate of the current would be about 8 miles per hour.
Q. Now, I'll ask you what, in your opinion as a pilot, would become of a boat which was in that position and the pilot should undertake to turn in and cross the head of the draw rest and take the south draw; where would she go to?
A. He would go right on the draw rest & break her back.

This was all the evidence in the case.

Whereupon the plaintiff prayed the court to instruct the jury as follows:

459 1. The jury are instructed that unless the bridge mentioned in the answer had piers which were parallel to the current of the river and spans of not less than 160 feet in the clear on each side of the pivot pier, then said bridge is an illegal structure and an unlawful obstruction to the navigation of the Missouri river;

Q. Do you know Bob Bailey?
A. Yes, sir.
Q. Do you — anything about his habits of drinking?
A. Could not answer that from what I know myself. I never was on a boat with him.

PETER SMITH, being recalled on the part of the defendant, testified as follows:

Q. Mr. Gage asked you some cross-questions on cross-examination which I did not observe; I want you to explain them—that is, in regard to the shallowness of the water along where the pontoons were placed. I'll ask you what, in your judgment, caused the shallowness of the water along there.
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Q. You stated you have been a pilot a good many years?
A. I have.
Q. What boat have you been running this season?
A. The Gold Dust.
Q. What is her size?
458 A. She is the finest & longest boat I ever run in my life.
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(Witness shows on map how he came down the river.)

Q. What is the current at the point; what is the rate of the current?
A. I never got the boat within 100 yards of that place.
Q. I ask you in regard to the rate of the current. What is the rate of the current there?
A. I should judge about that time the rate of the current would be about 8 miles per hour.
Q. Now, I'll ask you what, in your opinion as a pilot, would become of a boat which was in that position and the pilot should undertake to turn in and cross the head of the draw rest and take the south draw; where would she go to?
A. He would go right on the draw rest & break her back.

This was all the evidence in the case.

Whereupon the plaintiff prayed the court to instruct the jury as follows:

459 1. The jury are instructed that unless the bridge mentioned in the answer had piers which were parallel to the current of the river and spans of not less than 160 feet in the clear on each side of the pivot pier, then said bridge is an illegal structure and an unlawful obstruction to the navigation of the Missouri river;

and if the jury believe from the evidence that it was not such a bridge, and further believe that the plaintiff's boats—Alice and St. Luke—or either of them, while attempting to pass through the draw of the bridge in charge of pilots exercising usual and ordinary care, struck draw rest of the bridge and were thereby damaged, then the jury will find their verdict for the plaintiff as to such boat or boats. Given.

2. If the jury believe from the evidence that the defendant erected its bridge mentioned in the answer in such manner that the pier thereof known as the pivot pier, with the draw rests attached thereto, was not parallel to the current of the river, and that the same so remained up to the time of the accidents to the plaintiff's boats complained of; or if the jury believe from the evidence that the defendant so constructed its said bridge that the span thereof on the south side of the pivot pier and next adjoining it was less than one hundred and sixty feet in length in the clear between said pier No. 1 and said pivot pier or the draw rest attached; and if the jury further believe from the evidence that plaintiff's steamboats, Alice and St. Luke, or either of them were, while plaintiff was navigating said river with said boat or boats, by reason of defendant's failure to have said pier parallel to said current, or by reason of defendant's failure to have said span one hundred and sixty feet in the clear, as above, thrown against the draw rest of said bridge and broken and injured, then the jury will find for the plaintiff for the damages so received by the boats or boat so injured, unless the jury are also satisfied from the evidence that the plaintiff's agents and pilots were guilty of negligence or unskillfulness in the management of said boats or boat so injured, and that such negligence or unskillfulness contributed directly to the accident or accidents by which said boats or boat were injured. Given.

3. If the jury believe from the evidence that there was a cross-current in the Missouri river setting out from the south shore thereof near where the pontoons had been fastened to said shore and running thence to the head of the draw rest attached to the pivot pier, and that said cross-current was created by the sinking of defendant's pontoons in the river during (the years) of 1873–'4, and that while defendant was navigating said river with steamboats, Alice and St. Luke, or either of them, and by its pilots using reasonable and ordinary skill and care in handling said boats or boat, said boats or either of them were by the force of said cross-current carried against said draw rest and injured, then the jury will find for the plaintiff the amount of the damage received by such boat or boats. Given.

4. The jury are instructed that if they find for the plaintiff for damages to said steamboats or either of them they will find for the amount of the charter value of such boat during the time of her necessary detention by reason of such injury, and also for the cost of necessary repairs caused by such injury, as the same are shown by the evidence, not exceeding, however, twenty-five hundred dollars for damages to the Alice and three thousand dollars for damages to the St. Luke. Given.

5. If the jury find for the plaintiff on account of damages to the steamboat Alice the form of the verdict will be: "We, the jury, find for the plaintiff on the first count in the petition and assess its damages for injuries to the Alice in the sum of — dollars;" and if the jury find for the plaintiff on account of the injuries received by the St. Luke the form of their verdict therefor will be:
460 "We, the jury, find for the plaintiff on the second count of the petition for damages to the steamboat St. Luke and assess the damages in the sum of — dollars.

6. If the jury believe from the evidence that the bridge of defendant was laid across the piers thereof at a slant of 18 degrees from right angles, and that said piers were parallel to the current of the river; that the adjoining piers to the central or pivot pier were each 161 feet in the clear as measured by the bridge, and only 153.672 feet as measured at right angles from the next adjoining piers to the pivot pier; was less than 160 feet in the clear on each side of the pivot pier, and were not built in conformity to the act of Congress authorizing the construction of said bridge, *and* said bridge is not a legal structure, but is an unauthorized obstruction in the channel of said Missouri river. Obj.; refused.

To the giving of each and all of which the defendant objected, but the court overruled the defendant's objections to said instructions numbered one (1), two (2), three (3), four (4), and five (5), and gave the same, but refused to give said instruction number six (6), to which said ruling of the court in overruling defendant's objections to plaintiff's first five instructions and in giving the same the defendant at the time excepted.

Defendant's Instructions.

The defendant asked the court to give to — jury the following instructions marked and numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 17, and which said instructions so marked and numbered are as follows:

1. The jury is instructed that upon the pleadings and evidence the plaintiff is not entitled to recover upon the second count in the petition. Refused.

2. The defendant is not liable to consequential damages growing out of the collision of a steamboat with its bridge across the Missouri river at Kansas City or any of its appurtenances. Refused.

3. Whether the bridge in controversy was built in accordance with the act of Congress entitled "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25, 1866, or not can only be determined in a direct proceeding on the part of the United States, and the plaintiff cannot recover in this action whether boats were carefully and skillfully handled or not in attempting to pass through the draw of said bridge. Refused.

4. If the jury believe from the evidence that the main channel of the Missouri river at Kansas City is on the south or Kansas City side of said river; that the bridge in question was, at the time of

the injuries complained of, a pivot drawbridge, with a draw over said channel at an accessible and navigable point, and had spans of not less than one hundred and sixty feet in length in the clear, measured by said bridge, on each side of the central or pivot pier of the draw and piers number one and three, respectively, on the south and north side of said central or pivot pier; that said spans were not less than thirty feet above low-water mark and not less than ten feet above extreme high-water mark, measuring to the bottom chord of said bridge; that the piers of said bridge were parallel with the current of said river at the time said bridge was built; that there was not room on said river for a span 250 feet on the south or Kansas City side of said drawbridge, then said bridge was constructed in conformity with the act of Congress entitled "An act to authorize the construction of certain bridges and to establish post roads," approved July 25, 1866, notwithstanding they may further believe from the evidence that the next adjoining span to said draw on the north side thereof was less than 250 feet. Refused.

461 5. If the jury believe from the evidence that the ice was running heavily through the south side of said draw at the time the steamer "Alice" attempted to pass through the same; that in coming down the river from Wyandotte she was coming down on the north side of said floating ice, and when within 3 or 400 feet of the nose of the upper draw rest of the bridge in question she suddenly turned her bow southeasterly into said floating ice, and in consequence of attempting thus to pass into said floating ice she was forced by said ice and current against the nose of said draw rest and thereby injured, they will find for the defendant on the first count in the plaintiff's petition. Refused.

6. If the jury believe from the evidence that the ice was running heavily in the channel of the river and through the south side of said draw of the bridge, and the steamer "Alice," by keeping in the middle of the ice, could have safely passed through the south draw of said bridge, and the pilot failed to run her into the middle of said ice until within three or four hundred feet of the nose of the upper draw rest of the bridge, then said pilot was guilty of such negligence as will preclude the plaintiff from recovery, and they will find for the defendant on the first count of the plaintiff's petition. Refused.

7. If the jury believe from the evidence that the ice was running heavily through the south side of said draw of said bridge and not heavily through the north side of said draw at the time the steamer "Alice" attempted to pass through the south side of said draw; that said steamer Alice was on the north side of said floating ice and could have passed through the north side of said draw of said bridge with safety by the exercise of such care and skill as a good, skillful pilot would have exercised under like circumstances, then the pilot of such boat was guilty of such negligence as precludes the plaintiff from recovery in this case, and the jury will find for the defendant on the first count in plaintiff's petition. Refused.

8. If the jury believe from the evidence that there was a cross-current in the south side of said draw of the bridge in question and

the steamer "Alice" was flanked against the upper draw rest of said bridge by reason of such current, and there was no such cross-current in the north side of said draw and a sufficient quantity of water to enable the boat to pass through said north side of said draw with safety, then the pilot was guilty of negligence in not running the "Alice" through the north side of said draw, and they will find for the defendant on the first count in plaintiff's petition. Refused.

9. If the jury believe from the evidence that there was a cross-current in the south side of said draw of the bridge in question and the steamer "Alice" was jammed up against the upper draw rest of said bridge by reason of such current, and there was no such cross-current in the north side of said draw and a sufficient quantity of water to enable the boat to pass through said north side of said draw with safety, then the pilot was guilty of unskillfulness in not running the Alice through the north side of said draw, and they will find for the defendant on the first count in the plaintiff's petition. Refused.

10. If the jury believe from the evidence that the southern obstructions described in plaintiff's petition were certain pontoons which had been placed there by the chief engineer at the time or soon after the bridge in question was completed for the protection of boats ascending and descending through the draw of said bridge; that said pontoons had stanchions upon the decks for the purpose of fastening boats thereto, so as to enable them to float down or warp up by means of said pontoons with safety; that said stanchions were in full view at the time that the steamer "Alice" attempted to pass through said draw, as alleged in the first count in the plaintiff's petition, and the officers and crew of said steamer neglected to fasten said boat to said stanchions, and, in consequence of said negligence, she got forced against the nose of the draw rest of said bridge and injured as alleged, they will find for the defendant on the first count in the plaintiff's petition. Refused.

462 11. If the jury believe from the evidence that there was no cross-current in the river created by the sinking of the pontoons in evidence, then the plaintiff cannot recover, and they will find for the defendant. Ref.

12. The proper measure of damage in this case is the cost of repairing the damage to the boat or boats in question and interest (on) the value of said boats at the rate of six per cent. per annum from the time that said damage was done until the same was or were repaired. Ref.

13. If the jury believe from the evidence that any of plaintiff's officers and agents had notice that the pontoons in evidence were sunk or out of position so that they could not be used at the time of the injury to the Alice, then it was the duty of her officers and agents to have exercised a degree of care and skill in descending through the draw of the bridge in question commensurate with the increased danger; and if the jury believe from the evidence that such care and skill were not exercised in attempting to descend through said draw they will find for the defendant on the first count in plaintiff's petition. Refused.

14. If the jury believe from the evidence that there was a cross-current in the south side of said draw of the bridge in question and the steamer St. Luke was flanked against the upper draw rest of said bridge by reason of such current, and there was no such cross-current in the north side of said draw, and there was sufficient quantity of water to enable the boat to pass through said north side of said draw with safety, then the pilot was guilty of unskillfulness in not running the St. Luke through the north side of said draw, and they will find for the defendant on the second count of the plaintiff's petition. Refused.

15. If the jury believe from the evidence that the pontoons were placed from pier No. 1 up the river at or after the completion of the bridge as the result of a conference between the engineer of the bridge and the steamboat interests at St. Louis, and to the placing of which pontoons the plaintiff, by its officers, then consented; that these pontoons or some of them had become sunken or out of place or out of the water by reason of the ice jamming on, under, or against them or by reason of the winter weather; and, although they may have to some extent obstructed navigation, yet the defendant had a reasonable time, under all the circumstances, after the ice had run out, in which to replace or secure them; and if the Alice was the first boat up in the spring of 1874 and before the ice had all run out or before a reasonable time, under all the circumstances, had elapsed to allow the defendant to ascertain the position of the pontoons and their probable effects on navigation of boats, then you should find for the defendant on the first count. Refused.

16. If the jury believe from the evidence that the pontoons were placed at the upper end of draw No. 1 after consultation of the bridge engineers and the steamboat interests at St. Louis, at which the plaintiff was present by its officers and consented to the placing of said pontoons there; that thereafter and in the spring of 1874 the plaintiff requested the removal of the said pontoons; that thereafter and before the accident to the St. Luke the defendant removed said pontoons by pulling them out and allowing them to float away or be used, except such portions of one or two of them as was under the mud and deposit, then you can find no damages on the second count by reason of such alleged obstructions. Refused.

17. If the jury believe from the evidence that the pontoons were placed at the upper end of pier No. 1 after consultation
463 of the bridge engineer and the steamboat interests at St. Louis, at which the plaintiff was present by its officers and consented to the placing of said pontoons there; that thereafter and in the spring of 1874 they requested the removal of said pontoons; that thereafter and before the accident to the St. Luke the defendant removed said pontoons by pulling them out and allowing them to float away or be used, except such portions of one or two of them as was under the mud and deposit, then you can find no damages on the second count by reason of such alleged obstructions, unless you also believe from the evidence that the cross-current caused by the sinking of said pontoons remained and existed at the time of such accident. Given.

The court refused to give said instructions, marked and numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16; to which ruling of the court the said defendant then and there excepted, and the court gave said instruction so asked for by the defendant and marked and numbered 17.

The defendant also asked the court to give instruction marked and numbered 18, which is in the following words:

18. If the jury believe from the evidence that any of the plaintiff's officers and agents had notice that the pontoons in evidence were sunk or out of position so that they could not be used at the time of the injury to the St. Luke, then it was the duty of her officers and agents to have exercised a degree of care and skill in descending through the draw of the bridge in question commensurate with the increased danger; and if the jury believe from the evidence that such care and skill were not exercised in attempting to descend through said draw they will find for the defendant on the second count in the plaintiff's petition.

Which instruction the court refused to give, but inserted there the words "and had caused a cross-current dangerous to navigation;" and which instruction so changed and given by the court is as follows:

18. If the jury believe from the evidence that any of the plaintiff's officers and agents had notice that the pontoons in evidence were sunk or out of position so they could not be used and had caused a cross-current dangerous to navigation at the time of the injury to the St. Luke, then it was the duty of her officers and agents to have execised a degree of care and skill in descending through the draw of the bridge in question commensurate with the increased danger; and if the jury believe from the evidence that such care and skill were not exercised in attempting to descend through said draw they will find for the defendant on the second count in plaintiff's petition.

To which ruling and action of the court in inserting said words the defendant then and there excepted.

Instructions by the Court.

The court, of its own motion, gave the following instructions, marked and numbered 1 and 2; to the giving of which the plaintiff and defendant both objected and then and there excepted; to said instructions so given by the court on its own motion the defendant then and there excepted, and which instructions so given by the court on its own motion are as follows:

464 1. The court instructs the jury that if they find from the evidence that at the time of the damage done to plaintiff's steamboat "Alice" the water in the north draw of said bridge was of sufficient depth and width to have passed said boat safely through the same with ordinary care and skill of the pilot on said boat, and the south draw of said bridge was filled with floating ice and had a cross-current running there through in the direction of the breakwater named in plaintiff's petition, and said pilot ran said boat

through the south instead of the north draw of said bridge, and in doing so was wanting in proper judgment, care, and skill, amounting to negligence, which contributed directly to the damage sustained by said boat, they must find for the defendant on the first count of said petition.

2. If the jury believe from the evidence that at the time of the injury complained of in the second count of plaintiff's petition as done to the steamboat "St. Luke" the water in the north draw of the defendant's bridge was of sufficient depth and width to have enabled the pilot on said boat, with ordinary care and skill, to have run said boat safely through the same, and that at the time a cross-current was running through and across the south draw of said bridge in the direction of the breakwater named in said second count, and that said pilot ran said boat through the south instead of the north draw of said bridge, and in doing so was wanting in proper judgment, care, and skill, amounting to negligence, which contributed directly to the injury sustained by said boat, they must find for the defendant on said second count.

And thereupon the jury found for the plaintiff the following verdict:

We, the jury, find for the plaintiff and assess its damages on the first count — the sum of twenty-four hundred ($2,400) dollars.

J. M. WALLACE, *Foreman.*

We, the jury, find on the second count for plaintiff and assess the damages at twenty-nine hundred dollars ($2,900).

J. M. WALLACE, *Foreman.*

And thereupon & on the same day, upon the return of said verdict, to wit, the 15th day of September, 1874, said defendant filed in said cause it- motion for a new trial, which said motion is in words & figures as follows:

465 In the Circuit Court of the County of Jackson, held at ——.

THE MISSOURI RIVER PACKET COMPANY, Plaintiff,

vs.

HANNIBAL & ST. JOSEPH RAILROAD COMPANY, Defendant.

The defendant comes & moves the court to set aside the judgment & verdict in this case and to grant to defendant a new trial for the following reasons:

1. The court excluded legal and competent evidence offered by the defendant.

2. The court admitted illegal and incompetent evidence offered by the plaintiff and against the objections of the defendant.

3. The court erred in refusing to give to the jury instructions asked and prayed for by the defendant.

4. The court erred in giving instructions asked by the plaintiff and against the objections of defendant.

5. The court erred in giving the instructions it gave on its own motion.

6. The court erred in refusing to sustain defendant's demurrer to the evidence.
7. The verdict and judgment are excessive and illegal.
8. The verdict is against the evidence and weight of the evidence.
9. The verdict and judgment should have been for the defendant.

JAMES CARR &
F. M. BLACK,
Att'ys for Def't.

Which said motion the court afterwards and on the 2d day of October, 1877, overruled; to which action of the court in overruling said motion defendant then and there excepted.

466 The defendant now brings this its bill of exceptions and prays the court that the same may be signed, sealed, and made a part of the record in this cause, which is accordingly done.

In witness whereof I, Samuel N. Woodson, judge of said court, have hereto signed my name and affixed my seal this 6th day of October, 1877.

S. N. WOODSON, *Judge.* [SEAL.]

STATE OF MISSOURI, } ss:
County of Jackson, }

I, Wallace Laws, clerk of the circuit court of Jackson county aforesaid, hereby certify that the foregoing is a true and correct transcript of the record, pleadings, and evidence, together with correct copies of the maps used in evidence and made part of the record in the above-entitled cause, as the same now remains of record and on file in my office.

In witness whereof I have hereunto set my hand and affixed the seal of said circuit court, at office, in Independence, this 6th day of November, A. D. 1877.

WALLACE LAWS, *Clerk,*
By E. J. NICKERSON, *D. C.*

Proceedings in Supreme Court of Missouri.

And afterwards, to wit, on May 5th, 1881, the following assignment of errors was filed in said cause, to wit:

467 In Supreme Court of the State of Missouri. April Term, 1881.

THE MO. RIVER PACKET CO., Respondent,
vs.
H. & ST. JO. R. R. CO., Appellant.

MAY, 5' 81.

And now comes the said appellant and says that in the record and proceedings of the court below in the above-entitled cause there is manifest error, and for error said appellant assigns the following, to wit:

1. That said court admitted improper and illegal testimony offered by respondent.

2. That said court rejected proper and legal testimony offered by appellant.
3. That the court gave the jury improper and illegal instructions.
4. That the court refused to give the jury proper and legal instructions offered by appellant.
5. That the verdict was against the evidence.
6. That the verdict was against law.
7. That the verdict was against both law and evidence and against the law under the evidence.
8. That the verdict was against the weight of evidence.
9. That the judgment was rendered in favor of the respondent when it should have been rendered for the appellant.
10. That said court overruled the motion for a new trial made by appellant.
11. That the court erred in overruling appellant's plea to the jurisdiction of the court below.

EASLEY,
For Appellant.

And now come the —— and, for joinder in error, says there is no error in the record and proceedings of said —— in said cause as assigned by said ——.

—— ——.

[Endorsed:] No. —. Assignment of error.

468 And afterwards, to wit, on the 5th day of May, A. D. 1881, the following further proceedings were had in said cause, to wit:

Submission.

MISSOURI RIVER PACKET CO., Resp.,
vs.
HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, App.

Appeal from Jackson county circuit court.

Now, at this day, come the parties, by attorneys, and, after argument herein, submit this cause to the court.

And afterwards, to wit, on the 17th day of December, A. D. 1883, the following further proceedings were had in said cause, to wit:

Judg't.

THE MISSOURI RIVER PACKET COMPANY, Respondent,
vs.
THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, Appellant.

Appeal from Jackson county circuit court.

Now, at this day, come again the parties aforesaid, by their respective attorneys, and the court here being now sufficiently advised

of and concerning the premises, do consider and adjudge that the judgment aforesaid, in form aforesaid by the said Jackson county circuit court rendered, be in all things affirmed and stand in full force and effect; and it is further considered and adjudged by the court that the said respondent recover against the said appellant its costs and charges herein expended and have therefor execution.

Which said opinion is in words and figures following, to wit:

469 *Opinion.*

In the Supreme Court of Missouri. October Term, 1883.

THE MISSOURI RIVER PACKET COMPANY, Respondent,

vs.

THE HANNIBAL & ST. JOSEPH — COMPANY, Appellant.

Opinion of the court.

The petition was filed February 20th, 1875, and contained two counts. The first alleged that prior to the fourth day of March, 1874, the defendant had erected, and on said day maintained, in the Missouri river, near the southern bank thereof, at Kansas City, a certain lumber and timber structure, and nearer the center of the river at that point another structure, box-like in form, and filled with stone, rising to a height of thirty feet or more above the surface of the river, both of which are alleged to be obstacles in the way of vessels and rendered navigation dangerous.

That said said structures were erected and maintained wrongfully and in violation of the rights of the plaintiff and the public to the free and unobstructed use of the river as a highway.

That the first-mentioned structure had changed the ordinary current of the river, which had formerly been parallel to the surface of the structures, so that on the fourth day of March, 1874, it flowed with great velocity from the southern shore diagonally across toward the box-like structure near the middle of the river.

That while the Alice, one of plaintiff's steamboats, was on said day, in the exercise of due care and caution, attempting to pass down the river between said structures, it was by the changed current hurled from its course near the shore out into the river against said structure of timber and stone and was by the shock so injured that her repair became necessary, and during such repairs the plaintiff was deprived of the use of the boat, by means of which plaintiff sustained damages in the sum of $2,500, for which it prayed

470 judgment. The second count alleges an injury to the St. Luke, another of plaintiff's boats, occurring in the same way, on the fifteenth day of September, 1874, and prayed judgment on account thereof for $3,000.

To this petition defendant first interposed a plea to the jurisdiction, alleging "that the structures complained of were a part of the Kansas City bridge, owned by defendant, and erected by authority of an act of Congress; that the Missouri river was a navigable stream, and that said structures were located within the jurisdiction of the district court of the United States for the western district of Missouri,

which court had exclusive jurisdiction of the subject-matter of the action."

This plea was heard and overruled by the court & exceptions duly saved. Whereupon the defendant filed its answer, which was, in substance, as follows: The answer consisted of a general denial and a special defense, which stated that the Congress, by an act approved July 25th, 1866, authorized the construction of a bridge across the Missouri river at or near Kansas City; that the Kansas City & Cameron Railroad Company availed itself of the provisions of said act and built a bridge at Kansas City, which was — pivot drawbridge, with a draw over the main channel of the river at an accessible and navigable point, and with spans of 160 feet in length in the clear on each side of the pivot pier of the draw; that the next adjoining spans to the draw were 250 feet, and were thirty feet above low-water mark and ten feet above high-water mark, measuring to the bottom chord of the bridge, and with piers which were at the time of the location and construction thereof parallel with the current of the river; that the Kansas City and Cameron Railroad Company afterward consolidated with the defendant, whereby the latter became owner of the bridge, and was such on the fourth day of March,
471 1874, and thereafter; that under and by authority of said act of Congress the defendant maintained said bridge and the structures complained of in said plaintiff's petition, which the answer alleged were parts of said bridge; that by means of the premises said bridge was a lawful structure, and that if plaintiff had sustained any damage in consequence thereof the defendant was not liable therefor, and said act of Congress and the alleged compliance with its terms was pleaded as a full and complete bar to plaintiff's action.

The reply specifically denied compliance with the provisions of the act of Congress, that the spans were of the required length or that the piers were parallel to the current of the river, or that the structures mentioned in the petition were any part of the bridge. Upon this state of the pleadings the cause was tried by a jury. The evidence submitted before them, as we gather from the record, is quite voluminous, but we shall only refer to such portions as we deem necessary to a proper disposition of the material questions presented by the record. The sections of the act of Congress authorizing the building of the bridge are as follows:

"SEC. 2. And be it further enacted, That any bridge built under the provisions of this act may, at the option of the company building the same, be built as a drawbridge with a pivot or other form of draw, or with unbroken or continuous spans: Provided, That if the said bridge shall be made with unbroken or continuous spans it shall not be of less elevation in any case than fifty feet above extreme high-water mark, as understood at the point of location, to the bottom chord of the bridge; nor shall the spans of said bridge be less than two hundred and fifty feet in length, and the piers of said bridge shall be parallel with the current of the river, and the main span shall be over the main channel of the river and not less than three hundred feet in length: And provided also, That if

472 any bridge built under this act shall be constructed as a draw-bridge the same shall be constructed as a pivot drawbridge, with a draw over the main channel of the river at an accessible and navigable point and with spans of not less than one hundred and fifty feet in length in the clear on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than two hundred and fifty feet; and said spans shall not be less than thirty feet above the low-water mark and not less than ten feet above extreme high-water mark, measuring to the bottom chord of the bridge, and the piers of said bridge shall be parallel with the current of the river: And provided also, That said draws shall be opened promptly, upon reasonable signal, for the passage of boats whose construction shall not be such as to admit of their passage under the permanent spans of said bridge, except when trains are passing over the same, but in no case shall unnecessary delay occur in opening the said draw during or after the passage of trains.

"SEC. 3. And be it further enacted, That any bridge constructed under this act and according to the limitations shall be a lawful structure and shall be recognized and known as a post route, upon which also no higher charge shall be made for the transmission over the same of the mails, the troops, and munitions of war of the United States than the rate per mile paid for their transportation over the railroads or public highways leading to the same bridge.

"SEC. 10. And be it further enacted, That any company authorized by the Legislature of Missouri may construct a bridge across the Missouri river at the city of Kansas upon the same terms and conditions provided for in this act."

The last paragraph of the first section of said act is as follows:

"And in case of any litigation arising from any obstruction or
473 alleged obstruction to the free navigation of said river, the cause may be tried before the district court of the United States of any State in which any portion of said obstruction or bridge touches." In regard to the construction of the bridge, it appears that it is a pivot drawbridge; and while its piers are parallel with the current of the river they are not at right angles to the current of the river, but range diagonally across the current and the river. It also appears, necessarily, that the superstructure, or the bridge erected thereon, runs diagonally across the piers, the current, and the river. It further appears that the act of Congress under which the bridge was constructed provided that all drawbridges built under the act should be constructed as pivot drawbridges, with a draw over the main channel of the river at an accessible and navigable point, and with spans of not less than 100 feet in length in the clear on each side of the central or pivot pier of the draw. It also appears that while the measurement along the line or shore of the bridge (which runs diagonally across the piers and the current) gives a distance of 100 feet, yet the open space between the piers when measured, at right angles with the piers or current, was only 153 feet and a fraction. It also appears that the drawbridge, when swinging open to permit the passage of boats, rests upon two timber

structures, called upper and lower draw rests, which have for their foundation cribs sunk in the river and filled with rock. There is also an ice-breaker in front of the upper draw rest and forming a part of it. In addition to the upper and lower draw rests there were four cribs, two above and two below the pivot pier, and between it and the draw rests. These draw rests, thus connected with the pivot pier, were situated near the middle of the river, parallel with the current, and all taken together extended up and
474 down the river about the length of the draw, and were claimed to be necessary parts of the structure. The head of the upper draw rest, however, with its ice-breaker attached, was 180 feet above the pivot pier. On the south side of the south draw opening a row of pontoons were placed extending from pier No. 1 up the river about 340 feet to the shore—pier No. 1 being about 65 feet from the Kansas City shore and being the pier on which the south end of the draw rests when in position. These pontoons were constructed of a number of flat-boats, from 53 to 65 feet in length and from 18 to 20 feet in width, chained together, so that their outer edge presented a straight line next to the channel, and they thus formed a timber shore or floating dock. These pontoons were nearly parallel with the drawbridge when open, but gave somewhat greater width at the upper end on the shore than at the lower end at pier No. 1, to which it was fastened. At the trial these pontoons were not pretended to be any part of the bridge or structure which the defendant was by law authorized or required to place there or keep in position. They constitute what the petition denominates "a certain lumber and timber structure" near the southern point of the river at that point, while "the upper draw rest, with its ice-breaker attached," is what it designates "another structure, box-like in form," &c., situated near the center of the river, &c., both of which are charged to be obstacles in the way of vessels and dangerous to navigation, all of which will be better understood by the accompanying drawing. It further appears that the pontoons remained floating and in position until the latter part of the winter of 1873–'4, when they sank. The evidence for the plaintiff tended to show that they sunk transversely or in a direction quartering out into the river; that there was a cross-current starting from near the south shore, above the heads of the pontoons, and running diagonally across the river in the direction of the
475 upper draw rest, and that while the boats were attempting to pass the drawbridge in charge of skillful pilots exercising ordinary care and skill they were caught by the cross-current and hurled against the upper draw rest and injured, whereby they were damaged and disabled and required repairing, which was done at a large expense and outlay, and that they were necessarily detained from service and use for the period of from 15 to 20 days each; that the charter value or hire of said boats per day was at least $100, and that they could have been readily chartered or hired at that sum. On the other hand, the testimony for the defendant tended to show that no such cross-current existed, and that the injury to the boats occurred by reason of want of due care and skill of said pilots in the management of said boats. On all these several points there was a

large mass of conflicting and contradictory evidence on both sides. There was also much other irrelevant and unimportant testimony not necessary to notice. On this state of the facts, under the issues aforesaid, the court gave for the plaintiff, over the objections of the defendant, the following instructions, four in number, to wit:

1. The jury are instructed that unless the bridge mentioned in the answer had piers which were parallel to the current of the river and spans of not less than 160 feet in the clear on each side of the pivot pier, then said bridge is an illegal structure and an unlawful obstruction to the navigation of the Missouri river; and if the jury believe from the evidence that it was not such a bridge, and further believe that the plaintiff's boats, Alice and St. Luke, or either of them, while attempting to pass through the draw of the bridge in charge of pilots exercising usual and ordinary care, struck the draw rest of the bridge and were thereby damaged, then the jury will find their ver-
476 dict for the plaintiff as to such boat or boats.

2. If the jury believe from the evidence that the defendant erected its bridge mentioned in the answer in such manner that the pier thereof known as the pivot pier, with the draw rests attached thereto, was not parallel to the current of the river, and that the same so remained up to the time of the accidents to the plaintiff's boats complained of; or if the jury believe from the evidence that the defendant so constructed its said bridge that the span thereof on the south side of the pivot pier and next adjoining it was less than one hundred and sixty feet in length in the clear between said pier No. 1 and said pivot pier or the draw rest attached; and if the jury further believe from the evidence that plaintiff's steamboats, Alice and St. Luke, or either of them were, while plaintiff was navigating said river with said boat or boats, by reason of defendant's failure to have said pier parallel to said current, or by reason of defendant's failure to have said span one hundred and sixty feet in the clear as above, thrown against the draw-rest of said bridge and broken and injured, then the jury will find for the plaintiff for the damages so received by the boats or boat so injured, unless the jury are also satisfied from the evidence that the plaintiff's agents and pilots were guilty of negligence or unskillfulness in the management of said boats or boat so injured, and that such negligence or unskillfulness contributed directly to the accident or accidents by which said boats or boat were injured.

3. If the jury believe from the evidence that there was a cross-current in the Missouri river setting out from the south shore thereof near where the pontoons had been fastened to said shore and running thence to the head of the draw rest attached to the pivot pier, and that said cross-current was created by the sinking of defend-
477 ant's pontoons in the river during the winter of 1873–'4, and that while plaintiff was navigating said river with steamboats Alice and St. Luke or either of them, and by its pilots using reasonable and ordinary skill and care in handling said boats or boat, said boats or either of them were, by the force of said cross-current, carried against said draw rest and injured, then the jury will

find for the plaintiff the amount of the damage received by such boat or boats.

4. The jury are instructed that if they find for the plaintiff for damages to said steamboats or either of them they will find for the amount of the charter value of such boat during the time of her necessary detention by reason of such injury, and also for the cost of necessary repairs caused by such injury, as the same are shown by the evidence, not exceeding, however, twenty-five hundred dollars for damages to the Alice and three thousand dollars for damages to the St. Luke.

The defendant asked no less than 18 instructions, only two of which were given by the court, one of them, No. 18, in a modified form, to wit:

17. If the jury believe from the evidence that the pontoons were placed at the upper end of pier No. 1 after consultation of the bridge engineer and the steamboat interests at St. Louis, at which the plaintiff was present by its officers and consented to the placing of said pontoons there; that thereafter and in the spring of 1874 they requested the removal of said pontoons; that thereafter and before the accident to the St. Luke the defendant removed said pontoons by pulling them out and allowing them to float away or be used, except such portions of one or two of them as was under the mud and deposit, then you can find no damages on the second count by reason of such alleged obstructions, unless you also believe
478 from the evidence that the cross-current caused by the sinking of said pontoons remained and existed at the time of such accident.

18. If the jury believe from the evidence that any of the plaintiff's officers and agents had notice that the pontoons in evidence were sunk or out of position so they could not be used and had caused a cross-current dangerous to navigation at the time of the injury to the St. Luke, then it was the duty of her officers and agents to have exercised a degree of care and skill in descending through the draw of the bridge in question commensurate with the increased danger, and if the jury believe from the evidence that such care and skill were not exercised in attempting to descend through said draw they will find for the defendant on the second count in plaintiff's petition.

The court also of its own motion gave the following instructions over the objections of both parties, to wit:

1. The court instructs the jury that if they find from the evidence that at the time the damage — done to plaintiff's steamboat "Alice" the water in the north draw of said bridge was of sufficient depth and width to have passed said boat safely through the same with ordinary care and skill of the pilot on said boat, and the south draw of said bridge was filled with floating ice and had a cross-current running there through in the direction of the breakwater named in plaintiff's petition, and said pilot ran said boat through the south instead of the north draw of said bridge, and in doing so was wanting in proper judgment, care, and skill, amounting to negligence, which contributed directly to the damage sustained by said

boat, they must find for the defendant on the first count of said petition.

2. If the jury believe from the evidence that at the time of the injury complained of in the second count of plaintiff's peti-
479 tion as done to the steamboat St. Luke the water in the north draw of the defendant's bridge was of sufficient depth and width to have enabled the pilot on said boat, with ordinary care and skill, to have run said boat safely through the same, and that at the same time a cross-current was running through and across the south draw of said bridge in the direction of the breakwater named in said second count, and that said pilot ran said boat through the south instead of the north draw of said bridge, and in doing so was wanting in proper judgment, care, and skill, amounting to negligence, which contributed directly to the injury sustained by said boat, they must find for the defendant on said second count.

There was a verdict for plaintiff for $5,300, and judgment accordingly, from which the defendant, in due time and manner, appealed to this court.

The first question presented for our consideration by this record is the plea to the jurisdiction.

This plea, we think, was properly overruled. The language of the act of Congress relied on in support of this plea is as follows: "And in case of any litigation arising from any obstruction or alleged obstruction to the free navigation of said river the cause may be tried before the district court of the United States of any State in which any portion of said obstruction or bridge touches." The only pur-
pose and effect of this provision was to confer jurisdiction upon
480 the Federal court, and not to divest or exclude the common-law jurisdiction of the State court over such litigation. In such cases the common-law jurisdiction of the two courts is concurrent. There was, therefore, no error in overruling this plea.

The next question arises upon the special defence set up in the answer and here relied on, to the effect that the bridge and structures complained of were built under and in compliance with the authority of the act of Congress of July 25, 1866, and are, therefore, lawful structures, and that if plaintiff has sustained any damages in consequence thereof the defendant is not liable therefor. The law applicable to this question and pertinent to this case is well expressed by "Wood on the Law of Nuisances," in sections 302, 596, and 621, to the following effect:

"Whatever is authorized by statute within the scope of legislative powers is lawful, and therefore cannot be a nuisance; but this must be understood as subject to the qualification that when an act that would otherwise be a nuisance is authorized by statute it only ceases to be a nuisance so long as it is exercised within the scope of the powers conferred.

"But if the powers of the act are exceeded or are exercised in a manner different from that provided in the grant of authority the grant will be no protection, and the party doing the acts will be chargeable for a nuisance, at the suit of persons injured thereby, the same as though there had been no color of authority given for their exercise.

"The rule at present recognized may be stated to be that where a person sustains a special damage peculiar to himself, either in person or property, direct or consequential, from a public nuisance, whether arising from the obstruction of a highway or from any cause, he shall have his remedy therefor."

481 These positions are abundantly supported by the authority cited, and are believed to be a correct statement of the law upon this subject.

In the first place it must be remembered that in a proceeding like this it is not necessary to enquire or determine whether the bridge in question is so far unlawful and unauthorized as to be subject to removal as a public nuisance. With that question we have now nothing to do, and we express no opinion upon it. As has been said elsewhere, "It may be that in a case presenting that question it might be held that the obstruction to navigation is so slight as to be tolerated in view of the greater aid to commerce rendered by the structure;" but, upon the facts of this case and for the purpose of this action, in the language of the same court, "It is sufficient to say that if the structure is not according to the limitation of the act of Congress it is so far unauthorized, and the defendant is therefore liable for any injury to the plaintiff's vessels which was caused or contributed to by the unlawful structure." 2nd Federal Reports, 290; Mo. Riv. Pkt. Co. *vs.* H. & St. J. R. Co.

This, we think, is the fair construction and legal effect of the plaintiff's instructions on this branch of the case. These instructions, when viewed, as they should be, in the light of the issues and evidence in the cause, will, we apprehend, be found to contain nothing substantially antagonistic to the law on this subject as above announced in "Wood on the Law of Nuisances."

482 On the question of compliance with the act of Congress in the construction of the bridge the evidence on this point, as we have seen, is to the effect that while the piers of said bridge are parallel with the current of the river they are not at right angles to the current of the river, but range diagonally across the current and the river, and that the structure thereon necessarily runs in the same direction and at the same angle. The evidence also shows that while the measurement along the line or chord of the bridge gives a distance of one hundred and fifty feet, yet the open space between the piers and the structures connected therewith, when measured at right angles with the piers of the current, was only 153 feet and a fraction. Was this a compliance with the act of Congress in question? We think not. If such a reduction from such a measurement is permissible, why may not a larger reduction from a wider departure from the true line directly across the current be justified? In construing the act we must look to its spirit and reason. Its purpose manifestly was, as has been said, to reserve for the purposes of navigation 160 feet of open space in the clear, wholly unobstructed, and available for the passage of vessels. This result, as we have seen, is not obtained by measurement along the chord of the bridge, running as it does diagonally across the piers, the current, and the river, and such measurement cannot, therefore, be the correct one,

or within the intendment of Congress in the passage of the act. It follows, therefore, that the structure in question under the law and evidence in this cause and for the purpose of this action are so far unauthorized as to render the defendant liable for any injuries to plaintiff's vessels which were caused or contributed to by the unlawful structures while such vessels were attempting to pass through the draw of the bridge in charge of pilots exercising usual and ordinary care and skill. Mo. River Pkt. Co. *vs.* H. & St. Jo R.
483 Co.; 2nd Fed. R., 285; Dugan *vs.* Bridge Co., 27 Penn., 303; Judy *vs.* Terre Haute Bridge Co., 5 McLean, 237; Columbus Insurance Co. *vs.* Curtenius, *id.*, 209, and authorities cited. There are other minor questions incidental to this one mentioned in the briefs which are either necessarily involved in the decision of this one or otherwise unnecessary to a proper disposition of the case, and need not be further noticed. As it was not pretended at the trial, as we have seen, that the pontoons or lumber and timber structures near the southern bank of the river at that place were any part of the bridge or structure which the defendant was by law authorized or required to place there or keep in position, they were, confessedly, illegal structures and unauthorized obstructions to navigation, and the instructions for plaintiff on that point are clearly unobjectionable and need no comment. The instructions given by the court of its own motion, if subject to any criticism, are in no sense prejudicial to the defendant, and it cannot complain of them. Of the 18 instructions asked by the defendant two of them, the 17 and 18, were given, the latter in a modified form. Many of the others were, in substance, the opposite of those given or otherwise antagonistic to the law of the case, as hereinbefore declared. The rest of them were either mere legal abstractions or otherwise unimportant to the proper solution of the case. The next and only remaining question necessary to notice is as to the measure of damages and the instructions in that behalf. The instruction for the plaintiff on this question under the pleadings and evidence in the cause we think is unexceptionable. The jury were thereby told "that, if they found for the plaintiff, they will find for the amount of the charter value of such boat during the time of her necessary detention by reason of such injury, and also for the costs of necessary repairs caused by such injury, as the same are
484 shown by the evidence, not to exceed, however, $2,500 for damages to the Alice and $3,000 for damages to the St. Luke." This case is clearly distinguishable from that class of cases where it has been justly held that "speculative damages," or such as depend upon the probable profits and losses of steamboats during contemplated voyages, are altogether too uncertain and indefinite to be made the subject of judicial inquiry before a jury. In such cases the jury would have to weigh mere probabilities, and their task would be a mere calculation of chances. Not so under this instruction. The investigation in this particular is limited to the simple inquiry of the charter value or hire of the boats for the period of their necessary detention for the purpose of repairs. This question is simple in its nature of easy ascertainment and not obnoxious to the objection of chance, speculation, and probabilities. It is as easy

to ascertain as the rental value of a house for a given period or the monthly salary of a clerk; and, as we have seen that there was evidence before the jury tending to show the amount of the charter value of the boats in question, we see no just objection to the instruction upon the evidence in the cause. Mo. River Pkt. Co. *vs.* H. & St. Jo. R. Co., 2nd Fed. Rep., 294; Williams *vs.* Barrett, 13th Howard, 110; The Baltimore, 8 Wall., 387; The Cayugua, 14 Wall., 278; The Morning Star, 4 Bissell, 62; Whitehall Trans. Co. *vs.* N. J. Steamboat Co., 51 N. Y., 369; Mailler *vs.* Ex. Propeller Line, 61 N. Y., 316.

Upon the whole, the case seems to have — fairly tried under proper instructions, and as the evidence on all the controverted points was conflicting and contradictory the finding and judgment thereon will not be disturbed. For these reasons the judgment of the circuit court is affirmed.

R. D. RAY, *J.*

All concur.

485 And afterwards, to wit, on the 22d day of December, A. D. 1883, an appeal bond was filed in said cause, which is in words and figures following, to wit:

Appeal Bond.

Know all men by these presents that we, The Hannibal and Saint Joseph Railroad Company, as principal, and William H. Brownlee and Hamilton DeGraw, as sureties, are held and firmly bound unto the Missouri River Packet Company in the full and just sum of fifteen thousand dollars, to be paid to the said Missouri River Packet Company; to which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this twentieth day of December, in the year of our Lord one thousand eight hundred and eighty-three.

Whereas lately at the October term, A. D., 1883, of the supreme court of the State of Missouri, in a suit depending in said court between The Missouri River Packet Company, plaintiff, and The Hannibal and St. Joseph Railroad Company, defendant, judgment was rendered against the said Hannibal and St. Joseph Railroad Company, and the said Hannibal and St. Joseph Railroad Company having obtained a writ of error of the said court to reverse the judgment in the aforesaid suit, and a citation directed to the said Missouri River Packet Company, citing and admonishing it to be and appear at a Supreme Court of the United States to be held at Washington, D. C., on the second Monday of October next:

Now, the condition of the above obligation is such that if the said Hannibal and St. Joseph Railroad Company shall prosecute said writ to effect and answer all damages and costs if it fail to make

good its plea, then the above obligation to be void; else to remain in full force and virtue.

486 THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY,
By its treasurer, W. J. HILTON. [SEAL.]
W. H. BROWNLEE. [SEAL.]
H. DE GRAW. [SEAL.]

Sealed and delived in presence of—

GEO. W. EASLEY.

Approved by—

WARWICK HOUGH,
Chief Justice of the Supreme Court of Mo.

UNITED STATES OF AMERICA, *Western District of Missouri,* } *sct:*

Before me, the clerk of the supreme court of Missouri, personally appeared George W. Easley and Alex. W. Mullins, to me well known, who, upon oath, state that the sureties in the above bond are worth over and above their indebtedness the sum of twenty thousand dollars each, and that they own real property to that amount subject to execution in the State of Missouri.

GEORGE W. EASLEY.
A. W. MULLINS.

Subscribed and sworn to before me this 22nd day of December, 1883.

HENRY W. EWING,
Cl'k Sup. C't,
By E. B. EWING, *D. C.*

487 And afterwards, to wit, on the 26th day of April, A. D. 1884, the following further proceedings were had in said cause, to wit:

App. from Jackson Co. Cir. C't.

MO. RIVER PACKET CO., Respondent,
vs.
H. & ST. JO R. R. CO., App.

Now, at this day, upon motion of George W. Easley, Esq., attorney for appellant herein, leave is granted him to withdraw the maps filed in this cause.

STATE OF MISSOURI, *ss:*

I, Henry W. Ewing, clerk of the supreme court of Missouri, do hereby certify that the above and foregoing is a true and complete

transcript of the record and proceedings in the above-entitled cause as fully as the same remain of record and on file in my office.

In testimony whereof I have hereunto set my hand and affixed the seal of said court, at office, in the city of Jefferson, this 20th day of September, 1884.

[Seal of the Supreme Court of Missouri.]

HENRY W. EWING, *Cl'k*,

By E. B. EWING, *D. C.*

Endorsed on cover: Missouri supreme court. No. 163. The Hannibal & St. Joseph Railroad Company, plaintiff in error, *vs.* The Missouri River Packet Company, . Filed 29th October, 1884.

125-260

IN THE

Supreme Court of the United States,

OCTOBER TERM, A. D. 1887.

THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY,
Plaintiff in Error,
vs.
THE MISSOURI RIVER PACKET COMPANY,
Defendant in Error.

Error to the Supreme Court of Missouri.

BRIEF AND ARGUMENT FOR PLAINTIFF IN ERROR.

WIRT DEXTER,
JOHN J. HERRICK,
ATTORNEYS FOR PLAINTIFF IN ERROR.

BARNARD & GUNTHORP, LAW PRINTERS, 44 & 46 LASALLE ST., CHICAGO.

IN THE

Supreme Court of the United States,

OCTOBER TERM, A. D. 1887.

THE HANNIBAL AND ST. JOSEPH RAILROAD COMPANY,
Plaintiff in Error.
vs.
THE MISSOURI RIVER PACKET COMPANY,
Defendant in Error.

Error to the Supreme Court of Missouri.

STATEMENT.

This is a writ of error to the Supreme Court of the State of Missouri to review a judgment of that court affirming a judgment of the Circuit Court of Jackson County, Missouri, against the plaintiff in error.

The petition contained two counts. The first (Transcript 3) alleged that prior to the 4th day of March, 1874 the defendant had erected, and on that day maintained, in the Missouri River, near its southern bank at Kansas City, a certain structure composed of heavy timbers and lumber fastened together; and nearer the center of the river another structure, box-like in form, and filled with stone, rising to a height of 30 feet or more above the sur-

face of the river; that both of these structures were obstacles in the way of vessels and had rendered the navigation of the river dangerous and unsafe; that they were erected and maintained wrongfully and in violation of the rights of plaintiff and others to the free and unobstructed use of the river as a highway of commerce; that the first mentioned structure had changed the current of the river, which had formerly been parallel with the face of the structures, so that on the 4th of March, 1874 it flowed with great velocity from the point of the location of the first structure in a direction nearly at right angles to its former course towards the box-like structure near the middle of the river; that while the Alice, one of the plaintiff's steamboats, was attempting on that day, in the exercise of due care and caution, to pass down the river between the two structures, it was, by the changed current, hurled violently against the said structure of timber and stone and was thereby so injured that her repair became necessary and the plaintiff sustained damages in the sum of $2500.

To this petition the defendant first interposed a plea to the jurisdiction of the court, alleging (Transcript 5, 6), that the structures complained of were part of a bridge constructed under authority of an act of Congress entitled "An act to authorize the construction of certain bridges, and to establish them as post routes," approved July 25th, 1866; that the bridge was situated wholly within the jurisdiction of the District court of the United States for the Western District of Missouri, and that under the provisions of the act the District court of the United States for the Western District of Missouri, had exclusive jurisdiction over the subject matter of the suit. This plea was overruled by the court.

The defendant thereupon filed an answer. (Transcript, 6–11). This answer contained a general denial, and also alleged, as a special defense, that Congress, by an act approved July 25, 1866, authorized the construction of a bridge across the Missouri River at or near Kansas City; that the Kansas City and Cameron Railroad Company availed itself of the provisions of the act, and built a bridge at Kansas City; that the Kansas City and Cameron Railroad Company afterwards consolidated with the defendant, whereby the defendant became the owner of the bridge.

Section 2 of the act of Congress of 1866 provides (Transcript, 16, 17):

"Any bridge built under the provisions of this act may, at the option of the company building the same, be built as a draw-bridge, with a pivot or other form of draw, or with unbroken or continuous spans; * * * provided. also, that if any bridge built under this act shall be constructed as a draw-bridge, the same shall be constructed as a pivot draw-bridge, with a draw over the main channel of the river, at an accessible and navigable point, and with spans of not less than 160 feet in length in the clear, on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than 250,feet, and said spans shall not be less than thirty feet above low water mark, and not less than ten above extreme high water mark, measuring to the bottom chord of the bridge, and the piers of said bridge shall be paraliel with the current of the river."

Section 3 provided (Transcript 17): "Any bridge con-
" structed under this act and according to its limitations,
" shall be a lawful structure and shall be recognized and
" known as a post route." (The act of 1866 may be found in full in 14 U. S., Statutes at Large, at page 244).

The answer further alleged that the bridge so constructed was a pivot draw-bridge, with a draw over the main channel of the Missouri river at an accessible and navigable point, and with spans of 160 feet in length in

the clear on each side of the pivot pier of the draw, and and that the next adjoining spans to the draw were and are 250 feet, and the spans were and are thirty feet above low water mark, and ten feet above high water mark, measuring to the bottom chord of the bridge, and that the piers of the bridge were parallel with the current of the river; that the obstacles and structures described in the complaint were parts of the bridge and were and are necessary to its safe and secure maintenance; that the bridge has been ever since its completion a post route and a lawful structure.

The plaintiff replied to this special defense (Transcript, 12 and 13) denying that the bridge was constructed according to the act of Congress, and denying, among other things, that the bridge had spans 160 feet in length in the clear on each side of the pivot pier of the draw, or that the piers of the bridge were or are parallel with the current of the river, and averring that the structures complained of were erected and maintained in the river by the defendant without any authority of law, and denying that the bridge was a lawful structure.

The undisputed evidence showed that the bridge was a pivot draw-bridge, that its piers were parallel with the current of the river, but that they were not at right angles with the current, and ranged diagonally across it; that as a consequence the superstructure of the bridge, erected on the piers, ran diagonally across the current of the river at an angle of 18 degrees; that measuring the spans between the piers, along the line or chord of the bridge, gave a distance of over 160 feet; that the open space between the piers, at low water mark, measured on the line of the bridge structure, was also over 160 feet;

but that a line measured at right angles with the current was only 153 feet and a fraction.

It also appeared that the draw-bridge, when swinging open to permit the passage of boats, rested upon two timber structures, called upper and lower draw-rests, which had for their foundation, cribs sunk in the river and filled with rock. There was also an ice-breaker in front of the upper draw-rest, and forming a part of it. The draw-rests were connected with the pivot pier by cribs sunk in the water. These draw-rests, thus connected with the pivot pier, were situated near the middle of the river, parallel with the current, and all taken together extended up and down the river about the length of the draw, and were necessary parts of the structure. The upper draw-rest, with its ice-breaker attached, was what the petition designated, as "a certain other structure, to wit: a crib or "box, built of heavy timbers filled with stone," and was the structure with which the steamer came in collision.

The evidence also tended to show that near the river bank, on the south side of the south draw opening, a row of pontoons was placed, extending from pier No. 1. up the river about 340 feet to the shore, pier No. 1 being about sixty-five feet from the Kansas City shore, and being the pier on which the south end of the draw rested when in position. These pontoons were constructed of a number of flat boats from fifty-three to sixty-five feet in length, and from eighteen to twenty feet in width, chained together, so that their outer edge presented a straight line next to the channel. On the trial it was not claimed that these pontoons were any part of the bridge. They constituted what the petition called "a certain structure "composed of heavy timbers and lumber fastened to-"gether," near the southern bank of the river.

It further appeared that the pontoons remained floating and in position until the latter part of the winter of 1873–4, when they sank. The evidence for the plaintiff tended to show that they sank transversely, or in a direction quartering out into the river; that there was a cross-current, starting from near the south shore, above the head of the pontoons and running diagonally across the river, in the direction of the upper draw-rest; and that while the boats were attempting to pass the draw-bridge, in charge of skillful pilots, exercising ordinary care and skill, they were caught by the cross-current and hurled against the upper draw-rest and injured thereby. On the other hand the testimony for the defendant tended to show that no such cross-current existed, and that the injury to the boats occurred solely by reason of want of due care and skill of the pilots in the management of the boats.

The court gave to the jury the following, among other instructions asked for the plaintiff (Transcript 225–6):

"1. The jury are instructed that unless the bridge mentioned in the answer had piers, which were parallel to the current of the river, and spans of not less than 160 feet in the clear on each side of the pivot pier, then said bridge is an illegal structure, and an unlawful obstruction to the navigation of the Missouri river; and if the jury believe from the evidence, that it was not such a bridge, and further believe that the plaintiff's boats—Alice and St. Luke—or either of them, while attempting to pass through the draw of the bridge in charge of pilots exercising usual and ordinary care, struck draw rest of the bridge, and were thereby damaged, then the jury will find their verdict for the plaintiff as to such boat or boats."

"2. If the jury believe from the evidence that the defendant erected its bridge mentioned in the answer in such manner, that the pier thereof known as the pivot pier, with the draw rests attached thereto, was not parallel to the current of the river, and that the same so remained up to the time of the accidents to the plaintiff's boats complained of; or if the jury believe from the evidence, that the defendant so constructed

its said bridge that the span thereof on the south side of the pivot pier, and next adjoining it, was less than one hundred and sixty feet in length in the clear, between said pier No. 1 and said pivot pier, or the draw rest attached; and if the jury further believe from the evidence, that plaintiff's steamboats, Alice and St. Luke, or either of them were, while plaintiff was navigating said river with said boat or boats, by reason of defendant's failure to have said pier parallel to said current, or by reason of defendant's failure to have said span one hundred and sixty feet in the clear as above, thrown against the draw rest of said bridge and broken and injured, then the jury will find for the plaintiff for the damages so received by the boats or boat so injured, unless the jury are also satisfied from the evidence that the plaintiff's agents and pilots were guilty of negligence or unskillfulness in the management of said boats or boat so injured, and that such negligence or unskillfulness contributed directly to the accident or accidents by which said boats or boat were injured."

The jury rendered a general verdict for the plaintiff for $5,300, upon which judgment was entered.

As to the questions material in this court, the Supreme court of Missouri held:

1. Notwithstanding the provision of the act of congress giving jurisdiction to the District court of the United States, the State court had concurrent jurisdiction with that court and therefore the plea to the jurisdiction was properly overruled in the Circuit court;

2. That, while the piers of the bridge were constructed parallel with the current of the river as required by the act of congress, in determining whether the spans of the bridge on each side of the pivot pier were 160 feet in length in the clear, as required by the act, the measurement should be made at right angles with the current and not along the structure itself or on the line of the structure, and that therefore the structure causing the accident was not a lawful one.

These rulings present the federal questions in the case.

As to the first ruling, we do not agree with counsel for plaintiff in error in the court below, but believe that the point was correctly decided by the Supreme court of Missouri.

The case is therefore narrowed in this court to the single question arising on the construction given by the State court to that part of the act of congress which relates to the manner of the construction of the bridge.

It will be seen by the first and second instructions given for the plaintiff (Transcript 225, 226) that the jury were authorized to find for the plaintiff on the sole ground that the bridge was not constructed in accordance with the act of congress and was therefore an unlawful structure and an unauthorized obstruction to navigation. They were authorized to make this finding, irrespective of the controverted question of fact whether there was a cross current such as claimed by the plaintiff, or whether, if there was such cross current, it was in fact the cause of the accident.

By its special answer, defendant set up that the structure was authorized by the Act of Congress, alleging specifically compliance with its requirements. These allegations were denied by the plaintiff's reply.

On this claim of authority under the Act of Congress, specially set up by the defendant and denied by the plaintiff, the court gave the first and second instructions, the jury found against the claim, and on this finding a judgment was rendered.

By these instructions the question of compliance with the Act of Congress in two particulars was submitted to the jury: 1. Whether the piers were parallel to the current of the river, and 2. Whether the spans of

the bridge were less than 160 feet in the clear on each side of the pivot pier.

As to the first question, there was no controversy in the evidence, and the Supreme court of Missouri held that the piers were parallel to the current of the river.

Octave Chanute, the engineer who constructed the bridge, and whose deposition was read by the plaintiff, testified:

"The draw was located after careful survey, in order to cover as accurately as possible the navigable channel of the river. It could not have occupied a materially different position and been over the main channel of the river; it was located with special reference to the channel." (Transcript, 37.) * * * "The piers are placed parallel with the current. * * * Great care was taken by me to ascertain the exact direction of the current through the bridge and locating the bridge with reference to it." (Transcript, 38.)

Edmund O'Flaherty, also called for the the plaintiff, testified:

"In my judgment they (the piers), are located very near parallel with the current. * * * They were as near parallel as they could be." (Transcript, 85.)

The Supreme court of Missouri in their opinion say: "It's (the bridge's) piers are parallel with the current of "the river." (Rec., 473; Transcript, 237.)

And again: "The piers of said bridge are parallel "with the current of the river." (Rec., 482; Transcript, 242.)

The sole ground on which the Supreme court of Missouri held against the claim set up by the defendant was that the bridge was not constructed "with spans of not "less than 160 feet in length in the clear on each side of "the central or pivot pier of the draw," as required by the act of Congress.

On the undisputed evidence, this was purely a question of the construction of the act.

The evidence was undisputed, that if the span was measured either along the chord of the bridge itself or along the surface of the water, even at low water mark, following the direction of the bridge itself, the span was more than 160 feet in the clear.

Chanute testified that the bridge was constructed with "a pivot span 360 feet long, which gave two draw open-"ings of 160 feet, five inches, at dead low water in the "clear of the masonry." (Transcript, 36.)

And again:

"The distance between the first pier and the pivot pier is 160 feet three inches in the clear between their copings, meaning by copings the top course of masonry; * * * it is 162 feet and five inches in the clear between them at low water mark. These distances are measured by the bridge. The distances between the third pier and the pivot pier are the same, respectively, as between the first and pivot, measuring by the bridge. * * * The nearest distance between pier one and the pivot pier at low-water mark is 160 feet and three inches." (Transcript, 39.)

Edmund O'Flaherty, also for the plaintiff, testified:

"I find that the distance between the pivot pier and the next pier is 161 feet five inches—that is, measuring on the axis of the bridge—that is, a line run along the center of the bridge, it is exactly 161 feet and one-half inch. From pivot pier to pier No. 2, it is the same distance—that is the stage of water August 16th, 1875, 161 feet, ½ inch." (Transcript, 82.)

And again:

"This map, drawn by me and Case, represents the distance between pier No. 1 and the pivot pier. I make it 161 feet five inches at that stage of water. It was considerably above low-water on August 16, 1875; it would be about six feet above low-water." (Transcript, 85.)

(See also O'Flaherty and Case's sketch. Transcript, 129.)

On the other hand, it is uudisputed that the bridge crosses the river at an angle of eighteen degrees. (Transcript, 38.) And the evidence of O'Flaherty for the plaintiff that the space between the pivot pier and the piers on either side of the channel, measured at right angles with the current and not along the chord of the bridge or in the direction of it, is only 153 feet, $\frac{16}{100}$ inches (Transcript, 85), is undisputed.

The Supreme court of Missouri held, following a ruling of Judge McCrary (1 McCrary, 281), that this latter was the mode of measurement intended by the act of congress, and that, therefore, the structure was not in accordance with the act and an unauthorized and illegal structure.

The court state the question and its conclusion thus:

"The evidence also shows that while the measurement along the line or chord of the bridge gives a distance of 160 feet, yet the open space between the piers and the structures connected therewith, when measured at right angles with the piers or the current, was only 153 feet and a fraction. Was this a compliance with the act of Congress in question? We think not. * * * It follows therefore that the structure in question, under the law and evidence in this cause, and for the purpose of this action, are so far unauthorized as to render the defendant liable for any injuries to plaintiff's vessels which were caused or contributed to by the unlawful structures, while such vessels were attempting to pass through the draw of the bridge in charge of pilots exercising usual and ordinary care and skill." (79 Mo., pages 491–2.)

The opinion of the Supreme court of Missouri appears in the transcript of record at pages 235–244; by a clerical error, the measurement along the chord of the bridge is there stated as 150 feet; the true measurement, viz: 160 feet, is correctly given in the reported opinion in 79 Mo., pp. 491, 492.

Assignment of Errors.

The plaintiff in error assigns for error the following:

1. The Supreme court of Missouri erred in affirming the judgment of the Circuit court of Jackson county, Missouri.

2. The Supreme court of Missouri erred in holding that the Circuit court of Jackson county, Missouri, correctly instructed the jury as follows:

"1. The jury are instructed that unless the bridge mentioned in the answer had piers which were parallel to the current of the river, and spans of not less than 160 feet in the clear on each side of the pivot pier, then said bridge is an illegal structure and an unlawful obstruction to the navigation of the Missouri river; and if the jury believe, from the evidence, that it was not such a bridge, and further believe that the plaintiff's boats—Alice and St. Luke—or either of them, while attempting to pass through the draw of the bridge, in charge of pilots exercising usual and ordinary care, struck draw rest of the bridge, and were thereby damaged, then the jury will find their verdict for the plaintiff as to such boat or boats."

3. The Supreme court of Missouri erred in holding that the Circuit court of Jackson county, Missouri, correctly instructed the jury as follows:

"2. If the jury believe from the evidence that the defendant erected its bridge mentioned in the answer in such manner that the pier thereof known as the pivot pier, with the draw rests attached thereto, was not parallel to the current of the river, and that the same so remained up to the time of the accidents to the plaintiff's boats complained of; or if the jury believe from the evidence that the defendant so constructed its said bridge that the span thereof on the south side of the pivot pier, and

next adjoining it, was less than one hundred and sixty feet in length in the clear between said pier No. 1 and said pivot pier, or the draw rest attached; and if the jury further believe from the evidence that the plaintiff's steamboats Alice and St. Luke, or either of them, were, while plaintiff was navigating said river with said boat or boats, by reason of defendant's failure to have said pier parallel to said current, or by reason of defendant's failure to have said span one hundred and sixty feet in the clear, as above, thrown against the draw-rest of said bridge and broken and injured, then the jury will find for the plaintiff for the damages so received by the boats or boat so injured, unless the jury are also satisfied from the evidence that the plaintiff's agents and pilots were guilty of negligence or unskillfullness in the management of said boats or boat so injured, and that such negligence or unskillfullness contributed directly to the accident or accidents by which said boats or boat were injured."

4. The Supreme court of Missouri erred in deciding against the title, right, privilege and immunity, specially set up and claimed by plaintiff in error under the act of Congress of July 25, 1866, mentioned in the answer of plaintiff in error to the petition of defendant in error in the Circuit court of Jackson county, Missouri.

5. The Supreme court of Missouri erred in deciding that the Kansas City bridge was not constructed in accordance with the act of congress of July 25, 1866, and the requirements of section 2 of said act.

Brief and Argument.

THE SUPREME COURT OF MISSOURI ERRED IN HOLDING THAT THE BRIDGE WAS NOT CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ACT OF CONGRESS OF 1866, AND WAS THEREFORE AN ILLEGAL STRUCTURE.

In the State court the plaintiff in error set up in its special answer a right, title or authority under a statute of the United States. This right, title or authority was denied by the Supreme court of Missouri, on a construction of the statute, which the plaintiff in error controverted.

The case thus presented is clearly within the jurisdiction of this court.

If the construction adopted by the Supreme court of Missouri is contrary to the meaning of the act, then on the undisputed facts the court erred in ruling that the structure was an illegal structure and that the defendant was therefore liable.

Was the construction adopted by the Supreme court of Missouri the true construction?

The act contained two requirements material to the case before the court. One requirement was, that "the "piers of said bridge shall be parallel with the current of "the river." The obvious purpose of this requirement was to prevent deflections in the current or cross-currents

which might be caused by the construction of piers not parallel with the current. This requirement, as we have seen, the undisputed evidence shows, and the Supreme court of Missouri held, was complied with.

The language as to the other requirement is as follows:

"If any bridge built under this act shall be constructed as a draw-bridge, the same shall be constructed as a pivot draw-bridge, with a draw over the main channel of the river at an accessible and navigable point, and with spans of not less than 160 feet in length in the clear on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than 250 feet; and said spans shall not be less than thirty feet above low water-mark, and not less than ten above extreme high water-mark, measuring to the bottom chord of the bridge."

The express language of this provision is that the "bridge" * * * shall be *constructed* * * * with *spans* of not less than 160 feet in *length* in the clear on each side of the central or pivot pier of the draw."

The natural meaning of the word "span" in this connection is the structure which spans the river on either side of the pivot pier. This is the "span" of the "bridge" and it is this which is to measure "160 feet in "*length* in the clear on each side of the central or pivot "pier of the draw."

That it was the structure that was intended is also shown by the language,—"the *same* (the bridge) shall be *constructed* * * * with spans;" that is, the spans were part of the construction of the bridge itself.

This is further shown by the term used in defining the kind of measurement. It provides that the "span" shall be "*in length*" 160 feet, &c. This is the language appropriate and only appropriate for a measurement along the structure itself.

That the structure was referred to is also shown by the fact that the same word "span" is used repeatedly in the same section in connections which show that this was the meaning intended; thus: "Said spans shall not be "less than 30 feet above low water mark." Here is a plain reference to the structure itself.

In this view of the meaning of the word, the further words, "in the clear on each side of the central or pivot "pier of the draw," have an obvious meaning. They mean simply that the spans, clear of the piers, shall measure 160 feet in length.

We submit that it is going entirely outside the language of the provision under discussion to hold that it means that the open space on each side of the pivot pier, measured at right angles to the current, shall be 160 feet in width.

The ground on which the Supreme court of Missouri ignored the plain language of this provision is thus stated:

"In construing the act, we must look to its spirit and reason. Its purpose manifestly was, as has been said, to reserve for the purposes of navigation 160 feet of open space in the clear, wholly unobstructed and available for the passage of vessels."

This is not the language of the act. The act refers to certain parts of the structure, and requires that they shall be constructed with certain measurements. The intention was what the language of the act expresses, and the court had no right to infer an intention contrary to that anguage.

There is nothing whatever in the statute to show any intention on the part of Congress to reserve "160 feet of "open space, in the clear, wholly unobstructed;" such an

inference is a mere *speculation* as to what Congress inteuded, and is not based on the language used.

The act authorizes a bridge "across the Missouri River." (Sec. 10.) It nowhere defines the precise direction of the bridge. That direction is entrusted to the discretion of the company. The only requirements as to the mode of construction are found in section 2, which applies to a number of bridges over different rivers and at different places. The act presumably contemplated the possibility that a bridge might be constructed so as not to be exactly at right angles with the current. This, the particular location and the provision of the act itself that the bridge shall be constructed "with a draw over the "main channel of the river at an accessible and navigable "point," might make necessary. How did the court know but that Congress in fixing this particular measurement of the span considered such possible differences in the direction of the bridge? But, in any view, the court had no right to substitute for the language used by Congress other and different language. If Congress had intended that the "*space*" at right angles, across the channel should be measured, and not the "*span*," it would have said so.

It may be argued that our construction would lead to the result that the company could construct a bridge diagonally across the current at such an angle that in order to have 160 feet space in passing through the draw, a vessel would be obliged to go almost directly against the current.

The answer to this, is that the fact that the act does not define the exact direction of the bridge, but leaves the company a discretion in this particular, would not author-

ize such a construction by it as would amount to negligence. No doubt the company would be liable for a negligent manner of exercising the power conferred. But this furnishes no reason for a mode of measurement of the "*spans*," not prescribed by the statute.

The instructions on which we have assigned error were based on no theory of a negligent exercise of the powers conferred by the act.

The Supreme court of Missouri also erroneously held that the mere fact that the bridge was not constructed as required by the statute, rendered the company liable, irrespective of the question whether the improper construction caused the accident. This the court necessarily did in sustaining the first instruction given for the plaintiff.

By that instruction the jury were told that unless the bridge had piers parallel to the current and spans not less than 160 feet in the clear on each side the pivot pier, it was an illegal structure, and if plaintiff's boats struck it (the pilots exercising due care), the plaintiff must recover. This instruction does not require the jury to find that the improper mode of construction was the cause of the accident.

It cannot be contended that on any construction of the act of 1866, under which the bridge was built, a failure to comply with its requirements rendered the company liable for injuries resulting from a collision with the bridge, irrespective of whether the improper construction was the cause of the injuries.

The error in this first instruction was not cured by the second instruction given for the plaintiff. This has been repeatedly held in similar cases by the Supreme court of Missouri.

Goetz v. *R. R.*, 50 Mo.. 472.
State v. *Mitchell*, 64 Mo., 171.
Frederick v. *Allgaier*, 88 Mo., 599.
Ins. Co. v. *Hauck*, 83 Mo., 21.

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Defendant in Error.

NO. 163.

ERROR TO SUPREME COURT OF MISSOURI.

Statement and Brief for Defendant in Error.

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STATEMENT OF CASE, BRIEF AND ARGUMENT FOR DEFENDANT IN ERROR.

STATEMENT.

This action was brought in February, 1875, in the Circuit Court of Jackson County, Missouri, by the defendant in error against the plaintiff in error. The petition contained two counts, of which the first was as follows:

Plaintiff states that it is, and for the five years last past has been a corporation organized and created under and by virtue of the laws of the State of Missouri, and during said period has been and still is the owner and proprietor of numerous steamboats, including the steamboat named "Alice," hereinafter

mentioned, with which it has, as such corporation, during said period been engaged in navigating the waters of the Missouri River and conveying and transporting, by means thereof, passengers and freight between the various towns and cities situated on the banks of said river in the States of Missouri and Kansas.

That the defendant is, and for the last twenty years has been, a railroad corporation, organized under and by virtue of the laws of the State of Missouri.

That the Missouri river, for a long distance above the city of Kansas, in the county of Jackson and State of Missouri, and below said city to the mouth of said river, is a navigable stream; that prior to the 4th day of March, 1874, the defendant had erected, and prior thereto and on said day did keep and maintain, in the said river and the channel thereof, near the southern bank thereof, and near the foot of the street known as Broadway, in said city of Kansas, a certain structure composed of heavy timbers and lumber fastened together; and long prior to said day the defendant had erected, kept and maintained, and did on said day keep and maintain, in the channel of said river, in a point in said Jackson county and opposite said city of Kansas, nearer the center of said river than the structure first above named, a certain other structure, to-wit: a crib or box built of heavy timbers filled with stone, which said crib or box extended from the bed of said river upward to a height of thirty feet or more above the surface thereof; that both of said structures were and always have been obstacles in the way of vessels passing by the same up and down said river, and have prevented and rendered the navigation of said river dangerous and unsafe; that said structures were so erected, kept, and maintained by the defendant wrongfully, wilfully, and in flagrant disregard and violation of the rights of plaintiff and others to the free and unobstructed use of said river as a highway of

commerce; that before the erection of said structures the current of said river at and above and below the point where the same were located and erected, had been in a line nearly parallel to the faces of said structure, and the navigation of the same easy and safe.

But plaintiff states that the structure first above mentioned had, on said 4th day of March, 1874, caused the current of the river at that point to change so that it rushed with great velocity from the point of the location of said structure in a direction nearly at right angles to its former course towards and against said crib or box.

And plaintiff states that on said 4th day of March, 1874, it was, in the course of its business, navigating said river with its said steamboat "Alice," and while attempting, in the exercise of due care and caution, to run said boat by and between said structures, said boat was, without any fault of this plaintiff, by the current of the river, so changed as aforesaid, hurled violently against said crib or box, and the water wheel, wheel house, and other parts of said boat broken, injured and damaged.

That plaintiff was compelled to and did expend large sums of money in repairing said injuries to said boat, and was, on account of the injuries thereto wholly deprived of the use of the same and of the earnings thereof for the period of thirteen days, to plaintiff's damage in the sum of twenty-five hundred dollars, for which, with interest from the 1st day of April, 1874, plaintiff prays judgment against the defendant.

The second count was in substantially the same form and asked for damages for an injury to the steamboat "St. Luke," occurring on September 15, 1874.

At the March term, A. D. 1875, the railroad company, defendant, filed its plea to the jurisdiction of the court. The plea was as follows:

The said defendant, by its attorney, comes and says that the court ought not to have or take further cognizance of the above-entitled cause, because it says that the supposed causes of action and each of them, in the plaintiff's petition filed in said cause, accrued to the plaintiff out of the jurisdiction of this court; that the Missouri river described in said petition was, at the time therein alleged and still is, navigable from the sea to and for a long distance above the city of Kansas, on said river, by vessels of ten tons or more burden; that under and by authority of an act of Congress, entitled, "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25th, 1866, and in pursuance of authority conferred upon the Kansas City & Cameron Railroad Company by an act of the General Assembly of the State of Missouri, entitled, "An act to amend an act entitled an act to incorporate the Kansas City, Galveston & Lake Superior Railroad Company, approved February 9th, 1857," approved March 11th, 1867, said Kansas City & Cameron Railroad Company constructed a bridge across said river at the city of Kansas between the date of the passage of said act and the 4th day of July, 1869; that by authority of said last mentioned act said Kansas City & Cameron Railroad Company was, on the 14th day of February, 1870, consolidated with the defendant, and the defendant, by virtue of said consolidation, became the owner of said bridge; that the structures and each of them described in plaintiff's petition and therein complained of were, at the time of the several injuries alleged in said petition and still are, a part of said bridge; that said bridge was

wholly situated, at the time of the injuries alleged in said petition, and still is, wholly situated within the jurisdiction of the District Court of the United States within and for the Western District of Missouri. Defendant avers that by reason of the premises said District Court of the United States within and for the Western District of Missouri has exclusive jurisdiction over the subject matter of said suit, and this the defendant is ready to verify. Wherefore it prays judgment whether this court can or will take further cognizance of the action aforesaid.

This plea was overuled.

At the September term, 1875, the defendant railroad company filed its answer, which is as follows:

Defendant, for answer to the first count or cause of action stated in plaintiff's petition filed in the above entitled cause, denies each and all the material allegations in said count.

Defendant for a second and further defense to the pretended cause of action alleged in said count, states that at the time of the injury complained of, it was, for a long time prior thereto, had been, and still is, a corporation created and organized under an act of the General Assembly of the State of Missouri. entitled, "An act to incorporate the Hannibal & St. Joseph Railroad Company," approved February the 16th, 1867 (1847), and the several acts amendatory thereof; that the defendant, under and by authority of its charter, was authorized to survey, mark out, locate, construct, maintain, and operate a railroad from the town of Hannibal, in the State of Missouri, to the town of St. Joseph, in said State; that under and by authority of said charter, defendant many years ago, did survey, mark out, locate, and construct said railroad, and has

been ever since, and is still maintaining and operating said railroad.

That under and by authority of an act of the General Assembly of the State of Missouri, entitled, "An act to incorporate the Kansas City, Galveston & Lake Superior Railroad Company," approved February 9th, 1857, there was thereby created a corporation known as the Kansas City, Galveston & Lake Superior Railroad Company, and the several acts amendatory thereof; that the name of said Company was afterwards changed to that of the Kansas City & Cameron Railroad Company.

That said latter company was authorized by its charter to survey, mark out, locate, construct maintain, and operate a railroad from the City of Kansas, in Jackson County, Missouri, north to the north boundary of said State in the direction of Fon du Lac, on Lake Superior.

That said company did survey, mark out, locate and construct the Kansas City and Cameron railroad from the north bank of the Missouri river opposite the said city of Kansas to Cameron, on the Hannibal and St Joseph railro d; that under and by authority of an act of the General Assembly of the State of Missouri, entitled, "An act to incorporate the Kansas City Bridge Company," approved February 20th, 1865, there was conferred on the corporation therein named the exclusive right and privilege of constructing a railroad bridge at or near the city of Kansas over and across the Missouri river; that the corporators named in said last-mentioned act never organized under or accepted the said act; that under and by authority of an act of the General Assembly of the State of Missouri, entitled "An act to amend an act entitled, 'An act to incorporate the Kansas City, Galveston and Lake Superior Railroad Company,' approved February 9th, 1857," approved March 11th, 1867, the same authority, rights and powers were conferred upon said Kansas City

and Cameron Railroad Company to erect and maintain a railroad bridge and in connection therewith to erect and maintain a bridge for the passage of teams, carriages and foot passengers over and across the Missouri river at or near the said city of Kansas as had been conferred upon said Kansas City Bridge Company; that under and by authority of an act of Congress entitled "An act to authorize the construction of certain bridges and to establish them as post roads," approved July 25th, 1866, said Kansas City and Cameron Railroad Company was authorized to construct and maintain a bridge over and across the Missouri river at said city of Kansas, and to lay on and over said bridge railway tracks for the more perfect connection of any railroads that were then or might be thereafter constructed to the said river at or opposite said point; that under and by authority of said act of the General Assembly of the State of Missouri and said act of Congress, said Kansas City and Cameron Railroad Company, between the time of the passage of said last-mentioned act and the 4th day of July, A. D. 1869, constructed a bridge over and across the Missouri river at said city of Kansas, and laid on and over said bridge railway tracks for the more perfect connection of any railroads that then were or should thereafter be constructed to said Missouri river at or opposite said point where said bridge was constructed as aforesaid, and said bridge was also constructed for the passage of teams, carriages and foot passengers thereon; that said bridge was and is a pivot draw-bridge, with a draw over the main channel of said Missouri river at an accessible and navigable point, and with spans of 160 feet in length in the clear on each side of the pivot pier of the draw, and the next adjoining spans to the draw were and are 250 feet, and said spans were and are 30 feet above low-water mark and 10 feet above high-water mark, measuring to the bottom chord of said bridge, and the piers of

said bridge were at the times of the location and construction thereof, parallel with the current of said river.

That said Kansas City and Cameron Railroad Company maintained said bridge constructed as aforesaid from the time of the completion thereof, as aforesaid, until the 14th day of February, A. D. 1870, when said Kansas City and Cameron Railroad Company was under and by authority of said act of the General Assembly of the State of Missouri, entitled "An Act to amend an act entitled an act to Incorporate the Kansas City, Galveston and Lake Superior Railroad Company, approved February 9th, 1857," approved March 11th, 1867, consolidated with defendant, and defendant in and by said consolidation became the absolute owner of the Kansas City and Cameron Railroad, and said bridge erected by said Kansas City and Cameron Railroad Company as aforesaid, and entitled to all the rights, privileges, and franchises which said Kansas City and Cameron Railroad Company had in and to said railroad and bridge, and defendant, under and by virtue of the authority aforesaid, has maintained and still maintains said bridge over and across the Missouri river at said point as aforesaid.

That the obstacles and obstructions [structures] described in said count and each of them were at the time alleged in said count and still are parts and parcels of said bridge, and were at the time alleged in said count and still are necessary to the safe and secure maintenance of said bridge.

That since the completion of said bridge as aforesaid two other railroads, besides said Kansas City and Cameron Railroad, have been completed to said Missouri River at or opposite to the point where said bridge has been constructed on the north side of said river, to wit, the St. Louis, Kansas City and Northern Railway, running from the city of St. Louis, in the State of Missouri, to said bridge, and the Kansas City,

St. Joseph and Council Bluffs railroad, running from Council Bluffs in the State of Iowa, to said bridge.

That defendant and each of the railroad companies owning and operating said railroads are common carriers of passengers and property, and carry and transport a large number of passengers and property over said bridge. The said bridge has been ever since the completion thereof and still is a post route. Defendant avers that by means of the premises said bridge has been ever since its completion and still is a lawful structure, and if plaintiff has sustained any damage in consequence thereof it has been without any fault on the part of defendant and the defendant is not legally liable therefor.

Defendant, therefore, sets up and pleads the foregoing as a full and complete bar to the cause of action alleged in said count.

The answer to the second count was in the same form.

At the same term the Packet Company, plaintiff, filed its reply, which was as follows:

Plaintiff, for reply to the second defense, pleaded to the first count of the petition, admits that the said Kansas City and Cameron Railroad Company did build a bridge at the place mentioned, pretending to build the same under and by authority of the several acts mentioned, but denies that said bridge was constructed according to said acts of the General Assembly and of Congress or either of them; denies that said bridge has spans of 160 feet in length in the clear on each side of the pivot pier of the draw, or that the next adjoining spans are 250 feet, or that the piers of said bridge were at the time of the location or con-

struction thereof, or are, parallel with the current of the river; admits that the defendant has maintained and still maintains said bridge, but denies that it so maintains the same under the authority of any of the acts mentioned.

Plaintiff denies that the obstacles and structures described in said count or any of them were at the time mentioned or still are parts or parcels of said bridge, or that they are or ever were necessary to the safe or secure maintenance thereof.

Plaintiff admits that they were placed near to and in some manner connected with said bridge, but were so erected and maintained in the river by defendant without any authority of law or of any of the acts mentioned and were not parallel to the current of the river.

Plaintiff denies that by means or authority (of anything) in said defense stated, said bridge has ever been or still is a lawful structure, and denies that plaintiff's damage has been maintained (sustained) without fault of the defendant, or that defendant is not legally liable therefor.

The reply to the second defense was in the same form.

At the September term, 1877, the case came on for trial before a jury and resulted in a verdict for the plaintiff of $2,400 on the first count and $2,900 on the second count, on which verdict judgment was rendered in favor of the plaintiff for $5,300.

The act of Congress of July 25th, 1866, referred to in the answer, is found in 14 U. S. Stat. at Large, 244, and is as follows:

AN ACT

To authorize the construction of certain bridges and to establish them as Post Roads

Be it Enacted by the Senate and House of Representatives of the United States of America, in Congress assembled:

That it shall be lawful for any person or persons, company or corporation, having authority from the States of Illinois and Missouri for such purpose, to build a bridge across the Mississippi river at Quincy, Illinois, and to lay on and over said bridge, railway tracks, for the more perfect connection of any railroads that are or shall be constructed to the said river at or opposite said point, and that when constructed, all trains of all roads terminating at said river, at or opposite said point, shall be allowed to cross said bridge, for reasonable compensation, to be made to the owners of said bridge, under the limitations and conditions hereinafter provided. And in case of any litigation arising from any obstruction, or alleged obstruction, to the free navigation of said river, the cause may be tried before the district court of the United States of any State in which any portion of said obstruction or bridge touches.

SEC. 2. *And be it further enacted,* That any bridge built under the provisions of this act may, at at the option of the company building the same, be built as a draw bridge, with a pivot or other form of

draw, or with unbroken or continuous spans: *Provided*, That if the said bridge shall be made with unbroken and continuous spans, it shall not be of less elevation in any case than fifty feet above extreme high-water mark, as understood at the point of location, to the bottom chord of the bridge, nor shall the spans of said bridge be less than two hundred and fifty feet in length, and the piers of said bridge shall be parallel with the current of the river, and the main span shall be over the main channel of the river and not less than three hundred feet in length; *And provided also*, That if any bridge built under this act shall be constructed as a draw-bridge, the same shall be constructed as a pivot draw-bridge, with a draw over the main channel of the river at an accessible and navigable point, and with spans of not less than one hundred and sixty feet in length in the clear on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than two hundred and fifty feet, and said spans shall not be less than thirty feet above low-water mark, and not less than ten above extreme high-water mark, measuring to the bottom chord of the bridge, and the piers of said bridge shall be parallel with the current of the river; *And provided also*, That said draw shall be opened promptly upon reasonable signal for the passage of boats, whose construction shall not be such as to admit of their passage under the permanent spans of said bridge, except when trains are passing over the same; but in no case shall unnecessary delay occur in opening the said draw during or after the passage of trains.

SEC. 3. *And be it further enacted:* That any bridge constructed under this act, and according to its limitations, shall be a lawful structure, and shall be recognized and known as a post route; upon which, also, no higher charge shall be made for the trans-

mission over the same of the mails, the troops, and the munitions of war of the United States, than the rate per mile paid for their transportation over the railroads or public highways leading to said bridge.

SECS. 4, 5, 6, 7, 8 and 9 authorize the building of bridges at other points upon the same terms.

SEC. 10. *And be it further enacted:* That any company authorized by the legislature of Missouri, may construct a bridge across the Missouri River, at the City of Kansas, upon the same terms and conditions provided for in this act.

SECS. 11 and 12 authorize the building of a bridge at St. Louis.

SEC. 13. *And be it further enacted:* That the right to alter or amend this act, so as to prevent or remove all material obstructions to the navigation of said river by the construction of bridges, is hereby expressly reserved.

Upon the trial, the evidence showed that "the certain structure composed of heavy timbers and lumber fastened together" mentioned in the petition, was a line of pontoons or flat boats placed in the Missouri river near the southern bank thereof, and that "the certain other structure, to-wit, a crib or box built of heavy timbers filled with stone," was the upper end of the upper draw-rest of a bridge across the Missouri river at Kansas City, both of which structures were claimed by the defendant to be part and parcel of such bridge.

The evidence showed that the construction of the bridge was begun in 1867 and finished in 1869. The Missouri river at Kansas City runs in an easterly direction; there were seven spans: first, a span 66 feet in length reaching from high ground on the Kansas City side of the river, across the tracks of the Missouri Pacific railroad, to the abutment on the Kansas City shore; next, a span of 130 feet from the Kansas City abutment to pier No. 1; next, a pivot span 360 feet long, reaching from pier No. 1 across the pivot pier, or pier No. 2, to pier No. 3; next, a span of 200 feet from pier No. 3 to pier No. 4; next, a span of 250 feet from pier No. 4 to pier No. 5; next, a span of 200 feet from pier No. 5 to pier No. 6; next, a span of 177 feet from pier No. 6 to the abutments on the north bank of the river. The pivot pier, or pier No. 2, is not located directly opposite pier No. 1, but is placed farther east or down the river; in like manner, pier No. 3 is not placed opposite the pivot pier, or pier No. 2, but is farther east or down the river. The piers were located so that the faces were parallel with the current of the river, or as nearly so as practicable. The superstructure or span reaching from pier No. 1 across the pivot pier and to pier No. 3, and forming the draw-bridge, ran, not perpendicularly, but obliquely to the current of the river and formed an angle with it and with the faces of the piers of 72 degrees, and an angle of 18 degrees with a line perpendicular to the current. (See Chanute's testimony, Record, pp. 36 and 38.) The distance between pier No. 1 and the pivot pier at the copings is 160 feet and 3 inches; 162 feet

and 10 inches at a point ten feet below the copings; and 160 feet and 5 inches at low-water mark; these are the distances measured along the line of the super-structure. (See Chanute's testimony, Record, p. 39.)

Another witness, O'Flaherty, testified from actual measurement that the distance between pier No. 1 and the pivot pier was 161 feet and one-half inch at the stage of water as it existed on August 16th, 1875. This measurement was also on the line of the super-structure. (Record p. 82.) From the pivot pier, a structure of timber was erected, extending up the river 170 or 180 feet, the upper end of which had for its foundation cribs sunk in the river and filled with stone, its upper surface and sides being planked. This structure was called the upper draw-rest, and, with another similar structure extending down the river from the lower side of the pivot pier, constituted supports for the span when the draw was open to admit of the passage of vessels. (Record pp. 36 and 37). These two structures constitute, practically, a continuation of the pivot pier.

The main channel is through the southern opening of the draw and is the one generally used by steamboats. (Record, pp. 39, 56, 90 and 131.) As the bridge approached completion, or at its completion, a line of pontoons or flat boats was placed next to the southern shore extending from pier No. 1, up the river about 340 feet; there were six or seven of them; they were 18 or 20 feet wide; from 50 to 65 feet in length, each of them; decked and floored over;

drew about 18 inches of water; were about parallel with the faces of the pier and draw-rest; the north side of the barges was flush with the north side of pier 1; were laid together about a foot apart so that their outer edge should present a straight line next to the main channel, thus forming a timber shore or floating dock of which use might be made by steamboats in descending through the draw. (Record pp. 37 and 38.) The lower end was fastened to the upper end of pier No. 1 by a cable chain and the upper was fastened to an eye-bolt in the rock on the shore by a wire cable. (Record p. 134.)

Although the distance between the structures measured along the line of the super-structure, was, according to O'Flaherty's measurement, 161 feet and one-half inch. the distance between them measured across and at right angles to the current, was 153.16 feet; there was that much open water between the piers. (O'Flaherty's testimony, p. 83.) The different distances between pier No. 1 and the pivot pier, stated by witness Chanute, measured along the line of the bridge, were 160 feet, 5 inches, 160 feet 3 inches, and 162 feet, and 10 inches; the perpendicular distances corresponding to each of these measurements would be respectively 152.57 feet, 152.41 feet and 154.86 feet. These are inevitable mathematical results, arising from the location of the super-structure across the current at an angle of 72 degrees instead of at a right angle.

During the winter of 1873–4 the pontoons were allowed to sink, so that all were out of sight except

the upper one, which hung out and dropped down in the river and at an angle toward the upper draw rest. The lower end of this was swung out; the others were under water. The pontoons remained sunk in this manner until the next winter, when a part of them were taken out of the river. A part of them were there, sunk in the river, at the time of the trial in September, 1877. Before the pontoons were sunk there was a strong current between pier No. 1 and the south shore. There was deep water there; a strong current swept the Kansas City shore.

After the sinking of the pontoons an eddy was formed there, causing slack water and a heavy deposit. After the sinking of the pontoons a deposit of earth was formed where there was good water, and slack water resulted, extending 600 feet above the bridge. The dirt deposit formed along the southern shore, subsequently to the sinking of the pontoons, extended 300 feet above the bridge and below the bridge. A sand-bar was formed where there was formerly good water. The sinking of the pontoons resulted in the establishment of a cross-current, running from their head, which set out from that point over toward the upper draw-rest. No such current existed before the sinking of the pontoons. The current flowed along by the pontoons through the south draw and between pier No. 1 and the Kansas City shore. While the pontoons were in position, boats descending the river made use of them by slipping along their side. (Vaughn's testimony, pp. 125, 126, 127 and 128; Gaunt's testimony, pp. 49 and 53; Tebeau's testimony,

p. 57; Waddell's testimony, pp. 88, 89, 90 and 104; White's testimony, p. 111; Gould's testimony, p. 63; Chanute's testimony, p. 37.)

Before any accident happened, the attention of Mr. Wise, the agent of the defendant and superintendent of the bridge, was called to the condition of the sunken pontoons and he was requested to have them removed. (Vaughan's testimony, pp. 125, 128 and 129.) During the construction of the bridge and at its completion, its want of conformity to law was the subject of remonstrance and objection on the part of the representatives of the navigation interests, and was the immediate subject of discussion between them and the bridge authorities. (Gould's testimony, pp. 62-66. LaBarge's testimony, pp. 195 and 196.) During the construction, the attention of the Chief Engineer in charge of the work, was distinctly directed to the peculiar relative position of the piers as then contemplated by him, and that the result of such location would be that the distance between them would fall short of that required by the act of Congress, but on account of the increased expense which a compliance with the law would entail, he determined to run the risk of the consequences. (Gould's testimony, pp. 65 and 66).

The evidence for plaintiff showed that on the 4th day of March, 1874, the "Alice," one of plaintiff's boats, was on her return trip to St. Louis and attempted to pass down the river through the south draw of the bridge in charge of a skillful and experienced pilot, her course being close to the south shore as was cus-

tomary and proper. She had made some progress through the draw, when the cross-current setting out from the head of the pontoons swung the stern of the boat out of her course and drove her against the upper draw-rest, the boat striking the draw-rest at the southwest corner (being the point marked "A" in the sketch attached to this brief.) (Tebeau's testimony, pp. 55, 56 and 57; Vaughan's testimony, page 125; Gaunt's testimony, p. 48.)

On the 15th of September, 1874, the "St. Luke," another of plaintiff's boats, while attempting to descend through the south draw, was injured in very much the same manner and from the same cause. (White's testimony, pp. 110 and 111; Waddell's testimony, pp. 88 and 89.)

Plaintiff's testimony tended to show that both of the boats at the time the accidents occurred, were being skillfully and judiciously managed and that it was through no fault of the pilots that the injuries were sustained.

On the other hand some of defendant's testimony tended to show that the collision with the draw-rest might have been avoided by proper care on the part of the pilots.

Plaintiff prayed the court for six instructions, the first five of which were given, but the sixth was refused. Those numbered 1 and 2 are in the printed statement of the plaintiff in error. Number 6 refused, was as follows:

6. If the jury believe from the evidence that the bridge of defendant was laid across the piers thereof at a slant of 18° from right angles, and that said piers were parallel to the current of the river; that the adjoining piers to the central or pivot pier were each 161 feet in the clear as measured by the bridge, and only 153.672 feet as measured at right angles from the next adjoining pier to the pivot pier, was less than 160 feet in the clear on each side of the pivot pier, and were not built in conformity to the act of Congress authorizing the construction of said bridge, and said bridge is not a legal structure, but is an unauthorized obstruction in the channel of said Missouri river.

The defendant prayed the court for eighteen instructions, all of which were refused except No. 17. Defendant's instruction No. 4 refused was as follows:

4. If the jury believe from the evidence that the main channel of the Missouri river at Kansas City is on the south side or Kansas City side of said river; that the bridge in question was, at the time of the injuries complained of, a pivot draw-bridge, with a draw over the said channel at an accessible and navigable point, and had spans of not less than one hundred and sixty feet in length in the clear, measured by said bridge, on each side of the central or pivot pier of the draw and piers numbers one and three, respectively, on the south and north side of central or pivot pier; that said spans were not less than thirty feet above low-water mark and not less than ten feet above extreme high-water mark, measuring to the bottom chord of said bridge; that the piers of said bridge were parallel with the current of said river at the time said bridge was built; that there was not room on said river for a span 250 feet on the south or Kansas

City side of said draw-bridge, then said bridge was constructed in conformity with the act of Congress, entitled "An act to authorize the construction of certain bridges, and to establish post roads," approved July 25th, 1866, notwithstanding they may further believe from the evidence that the next adjoining span to said draw on the north side thereof was less than 250 feet.

The Supreme Court of Missouri considered the question squarely before it, and decided distinctly that the distance prescribed by the act of Congress, must be measured on a line perpendicular to the faces of the piers and the current of the river, and not along the line of the superstructure; and that the distance so measured, being confessedly less by six or seven feet than that required by the act of Congress, the defense of conformity to that act had not been made out.

BRIEF.

The errors assigned and relied upon here are:

First. The construction by the State court, of section 2, of the Act of July 25, 1866.

Second. The ruling of the Supreme Court of the State, approving the giving of plaintiff's instruction No. 1.

I

The first question springs from the peculiar location of the piers.

(*a.*) It appears that the piers of the bridge instead of being placed upon a line at right angles to the current, were located upon a line which formed an angle of 72 degrees with the current. The pivot pier instead of being placed directly opposite or north of pier No. 1, was built 40 or 50 feet further east or down the river. And the next adjoining pier, No. 3, was built upon the extension of the same line or still further east or down the river. The faces of the piers were parallel with the current of the river. The superstructure or spans of the bridge, when laid upon the piers formed an angle with their faces of 72 degrees, and an angle with a line perpendicular to the faces of the piers of 18 degrees. The bridge, therefore, instead of being thrown across the river so as to run north from the Kansas City shore and at right angles

with the current, ran in a direction 18 degrees east of north. The structure of wood and stone, intended for the support of the upper part of the draw span when the draw was open, extended west from the pivot pier for a distamce of 170 or 180 feet, and formed practically a continuation or extension of that pier. From this method of construction the result followed, that while the distance from pier No. 1 to the pivot pier, measured along the line of the span, and upon a line oblique to the current, was 161 feet and a fraction, the distance between pier No. 1 and the structure made up of the pivot pier and its said westerly extension, measured across the current and upon a line perpendicular to the faces of the piers, was, at the most, 153 feet and a fraction.

The Supreme Court of Missouri held that the distance of 160 feet required by the act of Congress, must be obtained by measuring along a line perpendicular to the faces of the piers and to the current of the river, and that, therefore, the defendant's request for instruction No. 4 was properly refused by the trial court.

Any other construction than that adopted by the Supreme Court of Missouri, would be in conflict with the purpose of Congress in the passage of the law. That purpose is obvious. It was, while granting permission for the building of a bridge over a navigable stream, thus providing for continuous transportation by rail, at the same time to leave the public highway

thus traversed, and to a certain extent obstructed, in such a condition that navigation should not be unreasonably impeded or endangered. The hindrances to navigation to be anticipated from the erection of a bridge, would result from the establishment of piers in the river. The more nearly the highway could be preserved in its original condition, the less would be the danger to which vessels would be exposed; as the width of unobstructed water left for the passage of vessels should be increased, in the same proportion would the risks of collision be reduced. It must be assumed that it was understood that the natural and proper course of a boat through the draw, would be with, and not against the current. It was therefore required that the piers should be parallel with the current. In this connection it became incumbent upon Congress to determine, after the claims of conflicting interests had been considered, the minimum of the highway to be preserved for navigation; the minimum width of open water constituting the passage-way through which pilots must at their own peril take their boats. It was fixed at 160 feet. How was this prescribed distance to be measured? Not up and down the stream; not with the current; not obliquely, partly with and partly against the current, but manifestly upon a line perpendicular to the sides of the boats, in whose interest the passage way was guaranteed; perpendicular to the line of direction of the boats—as that line should exist at the time of hazard or passage through the draw, that is, a line identical with the current. The distance was to be measured *across* the current, at a right angle

with it. If the passage is with the current, the width of passage-way must be across the current.

Great stress is laid by the defendant upon the word "*spans*" in the law; and it is urged that the requirements of law have been fulfilled if the *spans* are 160 feet in length, irrespective of the direction they may take.

It is to be observed that this language occurs in a proviso, whose office is to limit the authority conferred in the body of the enactment, or impose conditions upon which the authority may be exercised. The proviso was inserted not for the benefit of the bridge, but in the interest of navigation. The spans should not be *less* than 160 feet—they should not be *less* than 30 feet above low-water mark.

In the light of the object to be accomplished, the length of the spans, considered simply as spans, was of no importance whatever. It was not from the spans that any danger was to be apprehended, whether they were longer or shorter. It was only because of their connection with the piers, that their length became a matter of consequence. The form of expression used by Congress in reference to the spans, was for the purpose of fixing the distance between the piers, and for that purpose only; and the distance between the piers was material to the objects in contemplation, only as it represented the open space available for the passage of boats. In designating the minimum length of the spans, Congress adopted a simple, though perhaps an indirect method of fixing the minimum of water-way.

It was not in reference to the spans that Congress was concerned; its solicitude was respecting the space of open water *under* the spans, and when the proviso as to spans was engrafted upon the enactment, *space* was meant. The only object of the proviso was to secure space, and the plain and unmistakable effect of the language is the same as if the draughtsman had employed the word space.

Moreover, strict compliance with the language of the letter of the law, ensures 160 feet space in the clear on each side of the pivot pier measured at right angles across the channel, and nothing less than that will satisfy the literal requirements of the act. The requirement is "spans of not less than one hundred and sixty feet in length in the clear *on each side* of the central or pivot pier of the draw." Nothing short of 160 feet clear *side* measurement will meet the requisition, and side measurement is necessarily measurement at right angles to the pier and to the current to which the piers are parallel.

The construction contended for by the defendant, would permit a reduction of the perpendicular distance *ad libitum*. If a distance of 160 feet obtained by measuring on the line of the superstructure, with but 153 feet measured across the current, be compliance with the law, equal compliance would be afforded by a still greater reduction in the perpendicular distance, produced by the location of the pivot pier still farther down the river, and nearer the Kansas City shore, and the placing upon the piers of a span 160 feet in length,

forming a still greater angle with a line perpendicular to the current, and with the faces of the piers.

The extent to which the space of open water might be contracted would be limited only by the caprice or interest of those constructing the bridge. The navigable character of the river might be entirely destroyed.

Authorities in support of this natural and reasonable construction which the plaintiff claims for this act of Congress, would seem hardly necessary.

A similar question came before Judge Drummond relative to a bridge across the Illinois river at Peoria, and a like construction was placed by him upon the requirements of a law then under consideration.

"If for any purpose, the bridge was run irregularly across the channel, that was not a compliance with the act, unless the seventy-five feet were left open *across* the channel."

Columbus Insurance Co. v. Peoria Bridge Co., 6 McLean, 70.

The language of the provision of the act of the legislature of the State of Illinois, which was the subject of discussion in that case, was as follows:

"Provided a space of at least 75 feet from pier to pier, and embracing the principal channel of the river, be left and always kept open for the passage of all craft navigating the river."

The Circuit Court of the United States for the Western District of Missouri has passed upon the identical question now before the court, in a case involving the question of the conformity of the Kansas City bridge to the requirements of the act of Congress, under which it professes to be built, and its decision was adverse to the defendant.

Mo. River Packet Co. v. Hannibal & St. Joseph R. R. Co., 1 McCrary, 281.

(*b.*) But if the question, instead of being clear, were considered not free from doubt, the construction, upon well established rules of law, should be against the defendant.

Charles River Bridge v. Warren Bridge, 11 Pet., 544.

In the case last cited this court adopted the language of Lord Tenterden in

Canal Co. v. Wheeley, 2 Barn. & Ad., 793,

as follows:

"The canal having been made under an act of Parliament, the rights of the plaintiff are derived entirely from that act. This, like many other cases, is a bargain between a company of adventurers and the public, the terms of which are expressed in the statute; and the law of construction in all such cases, is now fully established to be this, that any ambiguity in the terms of the contract must operate against the

adventurers, and in favor of the public, and the plaintiffs can claim nothing that is not clearly given them by the act."

And Taney, chief justice, observed, "the doctrine thus laid down is abundantly sustained by the authorities referred to in this decision."

"In the case of the Charles River bridge, the rules of construction known to the English common law, were adopted and applied in the interpretation of legislative grants, and the principle was recognized, that charters are to be construed most favorably to the State, and that in grants by the public, nothing passes by implication. This court has repeatedly since reasserted the same doctrine; and the decisions in the several States are nearly all the same way. The principle is this: that all rights which are asserted against the State must be clearly defined, and not raised by inference or presumption; and if the charter is silent about a power, it does not exist. If, on a fair reading of the instrument, reasonable doubts arise as to the proper interpretation to be given to it, those doubts are to be solved in favor of the State; and where it is susceptible of two meanings, the one restricting and the other extending the powers of the corporation, that construction is to be adopted which works the least harm to the State."

The Binghampton Bridge, 3 Wall., 75.

"The rule of construction in this class of cases is that it shall be most strongly against the corporation. Every reasonable doubt is to be resolved adversely. Nothing is to be taken as conceded, but what is given in unmistakable terms, or by an implication equally clear. The affirmative must be shown. Silence is negation, and doubt is fatal to the claim. This doctrine

is vital to the public welfare. It is axiomatic in the jurisprudence of this court."

Fertilizing Co. v. Hyde Park, 97 U. S., 666.
Rice v. Railroad Co., 1 Black, 380.

"It is well settled that grants of this nature are to be construed strictly."

Newark Plank Road Co. v. Elmer et al., 9 Stock, 789.

"This case requires us to give a construction to the charter of a private corporation. The frequency of such cases excites some surprise when we reflect that an act of incorporation is, and always must be interpreted by a rule so simple, that no man, whether lawyer or layman, can misunderstand or misapply it. That which a company is authorized to do by its act of incorporation, it may do; beyond that, all its acts are illegal. And the power must be given in *plain* words or by *necessary* implication. All powers not given in this direct and unmistakable manner are withheld. . . . . In such cases, ingenuity has nothing to work with, since nothing can be either proved or disproved by logic or inferential reasoning. If you assert that a corporation has certain privileges, show us the words of the legislature conferring them. Failing in this you must give up your claim, for nothing else can possibly avail you. A doubtful charter does not exist, because whatever is doubtful, is decisively certain against the corporation."

And in the same case.

"If the powers given to the corporators cannot be executed without disregarding the restrictions with which they are coupled, they cannot be executed at all. In a private deed an exception as large as the grant is void because private deeds are construed most strongly against the grantor. But a grant of privi-

leges by the State to a body of adventurers must be construed precisely the other way—in favor of the public and against the grantees."

Black. C. J., in *Commonwealth v. Erie & Northeast R. R. Co.*, 27 Penn. St., 351.

"At the same time, it is extremely important to watch over the interests of those whose property is affected by these companies, to take care that the company shall not, in any misrepresentation they may make, if they have made any, be permitted to exercise powers beyond those which the act of parliament gives them, and to keep them most strictly within the powers of the act of parliament. The powers are so large—it may be necessary for the benefit of the public,—but they are so large, and so injurious to the interests of individuals, that I think it is the duty of every court to keep them most strictly within those powers; and if there be any reasonable doubt as to the extent of their powers, they must go elsewhere and get enlarged powers; but they will get none from me, by way of construction of their act of parliament."

Webb v. Manchester & Leeds Ry. Co., 4 Mylne & C., 120.

It is worthy of notice that the engineer in charge of the construction of this bridge located the piers in the peculiar and *unusual* manner shown by this record, in the face of assertions made at the time, that such location would not be in conformity with law, and would not afford sufficient space between the piers. He knew that his plans were challenged; that it was only by a strained rule of measurement, that the required distance could be obtained. But in order to avoid

additional expense, or to accomplish some other advantage for his company, he chose himself to assume the responsibility of solving every doubt in favor of economy, and placidly elected to trust to chance for impunity. (Gould's testimony, Record p. 65.)

Although the plaintiff is not here making any claim on account of it, a fair illustration of the disregard for law, which characterized the building of this bridge, is furnished by the fact that although the act of Congress required "the next adjoining spans to the draw tobe not less than 250 feet," the span next adjoining the draw on the north is according to the engineer's own measurement, but 200 feet. The operations of the company in the erection of this structure, were marked by deliberate defiance of the law in its letter and spirit—possibly in anticipation that the prospect of litigation continued for thirteen years, would be sufficient to deter sufferers from bringing violations of the law to the attention of the courts.

(*c.*) But even if the literal construction of the statute should support the contention of the defendant, the letter, if repugnant to the purpose of the law and the intention of the law makers as gathered from the statute, must give way. It is a cardinal rule of interpretation that a statute must be construed with reference to the objects intended to be accomplished by

it, and nowhere has this canon of construction received more distinct recognition than in the decisions of this court.

"This is a legislative act, and is to be interpretated according to the intention of the legislature, apparent upon its face. Every technical rule, as to the construction or force of particular terms, must yield to the clear expression of the paramount will of the legislature."

Wilkinson v. Leland, 2 Pet., 662.

"The duty of the court being satisfied of the intention of the legislature, clearly expressed in a constitutional enactment, is to give effect to that intention, and not to defeat it by adhering too rigidly to the mere letter of the statute, or to technical rules of construction. And we should discard any construction that would lead to absurd consequences. We ought, rather, adopting the language of Lord Hale, to be 'curious and subtle to invent reasons and means' for carrying out the clear intent of the law making power when thus expressed * * * A thing which is within the intention of the makers of the statute is as much within the statute as if it were within the letter; and a thing which is within the letter of the statute is not within the statute unless it be within the meaning of the makers."

Oates v. National Bank, 100 U. S., 244.

The words of the statute, if of common use, are to be taken in their natural, plain, obvious and ordinary signification; and it is an established rule of the courts, in giving construction to a statute, first to ascertain its intent. This may be determined, not only from the language of a part, but from the lan-

guage of the whole and every part of the statute; and the real intention when accurately ascertained, will always prevail over the literal sense. The intention of the law maker is sometimes to be collected from the cause or necessity of making the statute; and however the intent may be ascertained, it should be followed with reason and discretion, though such construction may seem contrary to the letter of the statute, for it is the intent which often gives meaning to words otherwise obscure and doubtful. * * And such construction ought to be put upon it as does not suffer it to be eluded."

Holmes v. Carley, 31 N. Y., 289.

"The principle of construction is that although a matter may fall within the words of the act, it shall not control it unless within reason and spirit also. A thing which is within the letter of the statute, is not within it unless within the intention of the makers."

Jersey Company v. Davison, 5 Dutch., 523.

"In the construction of statutes, effect must be given to the intent of the legislature whenever it can be discerned, though such construction seem contrary to the letter of the statute. That intent must be primarily sought in the language of the statute, and if the words employed have a well understood meaning, are of themselves precise and unambiguous, in most cases no more can be necessary than to expound them in their natural and ordinary sense. The words in such case ordinarily, best declare the intention of the legislature. These rules are elementary, but it is equally well settled that words, absolute of themselves, and language the most broad and comprehensive, may be qualified and restricted by reference to other parts of the same statute, in which they are used, and to the circumstances and facts existing at the time, and to

which they relate, or are applied. A literal interpretation of words in most common use, and having a well defined meaning as ordinarily used, would not unfrequently defeat rather than accomplish the intent of the party using them."

Smith v. People, 47 N. Y., 336.

"Hence the question arises, are we at liberty, when the words of the statute are plain and unambiguous, but are directly repugnant to the whole spirit and intent of all our legislation on the same subject and in the same act, and seem to involve an absurdity, to disregard the letter of the law, and attach it to that meaning, which the legislature really intended.

It is urged that when the language of the statute is plain, clear and intelligible, it is itself the best, and should be the only expositor of the meaning of the legislature. Theoretically, this argument would seem to furnish a safe rule of interpretation. Practically, it is not safe or sensible. A rigid adherence to it would not unfrequently involve us into contradictions, absurdities and palpable violations of the real intention of the legislature. The ignorance and inexperience of some legislators, the inability even of the wisest to foresee all the bearings and connections of an act—the great number of statutes proposed for enactment, and the variety of minds that modify and amend them, the haste of legislation—the imperfection of language and want of skill, accuracy and perspicuity in the use of it, and, not unfrequently, want of accuracy and clearness of ideas; these all contribute to produce errors, imperfections and inconsistencies in the phraseology of statutes. Hence the letter of the law is found by experience not to be in all cases a correct guide to the true sense of the law-giver. Hence have arisen those rules for the construction of statutes which look to the whole and every part of a statute, and the apparent intention derived from the whole, to the sub-

ject matter, to the effects and consequences, and to the reason and spirit of the law; and thus ascertain the true meaning of the legislature, though the meaning so ascertained conflict with the literal sense of the words. But illustrations and authorities are unnecessary to sustain a principle so well settled.
* * * *

We may, however, refer to one derived from an old book, which in its treatise on this subject, Judge Story calls 'an excellent summary of the rules for construing statutes;' and which for its sense and point is worthy of attention.

"In some cases the letter of an act of parliament is restrained by an equitable construction; in others it is enlarged; in others the construction is contrary to the letter. In order to form a right judgment, whether a case be within the equity of a statute, it is a good way to suppose the law maker present; and that you have asked him this question: Did you intend to comprehend this case? Then you must give yourself such answer as you imagine he being an upright and reasonable man would have given. If this be that he did mean to comprehend it, you may safely hold the case to be within the equity of the statutes; for while you do no more than he would have done, you do not act contrary to the statute, but in conformity thereto.'"

Ryegate v. Wardsboro, 30 Vt., 749.
State ex rel. v. Patterson, 35 N. J. Law 197.
State v. Clark, 5 Dutch., 599.
Sheriff v. Parish of Caddo, 37 La. Ann., 789.
State ex rel. R. R. Co. v. Nichols, 30 La. Ann. Part 2, p. 982.
Jackson v. Collins, 3 Cow., 96.
People ex rel. Ins. Co. v. Davenport, 91 N. Y., 584.
State ex rel. v. Clarksville & R. T. P. Co. 2 Sneed, 89.
Potter's Dwarris on Statutes, 144.

II

A reversal is asked also on account of the error alleged in plaintiff's instruction No. I. It is urged by the defendant that "this instruction does not require the jury to find that the improper mode of construction was the cause of the accident."

(*a.*) It is submitted that if this court shall be of the opinion that the views of the State court as to the proper construction of the Act of Congress were correct, an affirmance of the judgement should follow. The objection of the defendant to the plaintiff's first instruction raises no Federal question; and if no such question is involved, the objection will not be heard here nor is the action of the State court upon which the objection is founded, the subject of review in this court. If the only Federal question in the case—that of the construction of the Act of Congress—was properly decided by the State court, no other questions arising upon the record, should be considered.

Murdock v. City of Memphis, 20 Wall., 590.
Allen v. McVeigh, 107 U. S., 433.

Whether the jury should have been instructed that they must believe from the evidence that the improper mode of construction was the cause of the accident before they could find their verdict for the plaintiff, does not involve the construction of this Act of Congress; does not spring from any language peculiar to the enactment; and is simply a question of general common law jurisprudence. The gist of the criticism upon this instruction is that it authorizes the jury to find their verdict for the plaintiff, without requiring them first to ascertain the existence of connection between the alleged cause of the injury and the injury itself—or in other words, to trace the effect to the supposed cause. Even if this objection to that instruction be well taken, the principle which it embodies is involved in every action of tort; and the objection that such a principle has been ignored in any case, must be considered in the light of established doctrines of general law, and disposed of by the application of those doctrines.

The defendant contends that the Act of Congress authorized the building of the bridge and piers, according to the terms and conditions therein contained, and conferred immunity upon defendant, from liability for injuries, caused by a bridge so built, and that having built this pier, it is not liable for an injury by it, if the same or some similar injury would have occurred if the bridge had been built in strict compliance with the Act; or in other words, that the defendant is only liable for such damage as may have been caused by placing the pier in the wrong, instead of in the right

position. Whether or not the placing of the piers in this position was rightful or wrongful, is clearly a Federal question; whether or not the plaintiff suffered injury from the wrongful placing of the piers, is not a Federal question, but one of which the State court has complete and final jurisdiction, both over matters of law and matters of fact involved in it. Whether or not the unlawful placing of the piers, (if the illegality be admitted), caused the plaintiff's damage, in point of fact, or in point of law, involves no Federal question.

(*b.*) But if this instruction is to be considered on its merits, the objection to it is not well grounded. At common law every obstruction placed in a navigable stream is a nuisance, and he who, while using the stream as a public highway, and in the exercise of ordinary care, is injured in his person and property, by collision with the obstruction, may maintain an action to recover his damages against the party who created or maintains the nuisance.

"A vessel navigating a river, has a right to the unobstructed use of all its natural width, and if that width be unnecessarily diminished so as to impede navigation at all times, be it by night or by day, at high water or low water, in fair weather or in foul

the structure which occasions the injury, is a nuisance."

Newark Plank Road Co. v. Elmer, et. al., 9 Stock., 790.
Georgetown v. Alexandria Canal Co., 12 Pet., 97.
Wheeling Bridge Case, 13 How., 564.
Arundel v. McCulloch, 10 Mass., 70.

That the defendant placed or maintained in the river the structure, known as the upper draw-rest, is undisputed; that plaintiff's boats came in collision with the southwest corner of the draw-rest and thereby sustained the injuries complained of is also uncontroverted.

The plaintiff's petition did not charge the defendant with a violation of law in the construction or maintenance of any bridge, and seek to recover damages therefor. It did charge that the structures complained of were "erected, kept and maintaieed by the defendant wrongfully, willfully and in flagrant disregard and violation of the rights of plaintiff and others to the free and unobstructed use of said river as a highway of commerce."

The defendant in its answer pleaded the Act of Congress of July 25, 1866, and alleged that the structures mentioned in plaintiff's petition were all parts and parcels of a bridge which it was alleged had been built in strict compliance with the requirements of said Act of Congress. The answer described the bridge

in detail, and this description corresponded precisely with the requirements of the Act.

The answer further averred that "by means of the premises, said bridge had been ever since its completion, and still was a lawful structure, and that if plaintiff had sustained any damage in consequence thereof, it had been without any fault on the part of defendant, and that the defendant was not legally liable therefor."

Section 3 of the Act of Congress provided "That any bridge constructed under this Act and according to its limitations, shall be a lawful structure." This Act and exact compliauce with its terms, was pleaded as a full and complete bar to plaintiff's action.

The right of Congress to authorize the erection of bridges over navigable streams is undisputed, and if the evidence in the case had sustained the allegations in the answer as to compliance with the Act of Congress, it would have afforded a complete defense to the action. But the allegations of the answer were not supported by the proofs; compliance with the law was not shown; on the contrary, (if the construction of the law by the State court was correct), want of compliance was clearly shown by uncontradicted testimony. In the absence of legislative authority all obstructions in the river would be illegal; it was only under such authority, that such obstructions could be justified; under the Act of Congress, if the obstructions were of the kind and located in the manner provided for; if the bridge

were constructed "according to its limitations," it should not be subject to the condemnation of illegality which the common law would pronounce against it, but it should "be a lawful structure." But this exemption from common law liability, is only offered, and only attached to a bridge built *according to the limitations* of the Act. Failing to meet the requirements of the law, the structures were remitted to their predicament at common law—that of illegality, with all its consequences ~~of with~~ responsibility. Failure to comply with the requirements of law, whose protection was conditioned upon compliance, is tantamount in its consequences to the entire absence of any law.

By the Act in question Congress fixed definitely the distance between the piers, and in that respect nothing was left to the discretion of the company. Although, in point of fact, a bridge constructed according to the requirements of the law might be a serious obstruction to navigation, in point of law, by virtue of the Act it was a legal structure. The State of Missouri might authorize the building of a bridge, but if it resulted in a material obstruction to the navigation of the river, the Act of the Legislature would be no protection.

In order that immunity might be secured, the company therefore, applied to Congress, whose power to enact a law which would afford such immunity, was unquestioned. Thereupon, Congress upon full consideration of the subject, declared the conditions upon which the immunity asked for should be accorded, and

fixed the terms upon which the bridge should, in all courts, be held a legal structure. The description of the bridge whose construction was authorized, was particularly set out, and the result would have followed without the expression of it, that such bridge should be exempt from attack as an obstruction to navigation, and that a violation of the law would subject it to the liabilities of a nuisance at common law. But, as if to emphasize the law, as already recognized by the decisions of the Federal Courts, Congress enacted Section 3, and declared that a bridge built according to its limitations, should be a legal structure.

The defendant was under no compulsion to accept the authority conferred upon by this law; it enjoyed its option to build a a bridge or not to build a bridge. If accepted, it must be *cum onere*, with its advantages as well as its benefits. But in its answer in this case, the defendant pleads that it did accept the act; that it constructed a bridge such as the law required; and that by means of the Act, the alleged acceptance thereof, and compliance therewith, "the bridge is a lawful structure." Averment not only of the existence of the law and the defendant's acceptance thereof, but of its compliance therewith, was necessary in order to state a complete defense, and that necessity was recognized by the pleader.

The proposition that by a violation of the law, the protection of the law has been forfeited is abundantly supported by authority. The condition upon which the offer of protection was extended, not having been fulfilled, by a necessary sequence, the law

fails to operate as protection, and cannot be invoked in justification of acts, not only not within its authority, but in distinct violation of its exactions.

This court, referring to an aqueduct over the Potomac River, in process of construction under authority of an Act of Congress, it being alleged by the complainants among other things, that the defendants were exceeding the powers conferred upon them by the Act, used this language:

"Were it even admitted, that the canal company had exceeded the authority under which they are acting, nevertheless, as the Potomac River is a navigable stream, a part of the *jus publicum*, any obstruction to its navigation, would upon the most established principles, be what is declared by law to be a public nuisance, * * * If any particular individual shall have sustained special damage from the erection of it, he may maintain a private action for such special damage."

Georgetown v. Alexandria Canal Co., 42 Pet., 97

"But if the powers of the Act are exceeded, or are exercised in a manner different from that provided in the grant of authority, or if the act can be done so as not to be a nuisance, and the creation of a nuisance by the exercise of the power given, is not fairly the result of the exercise of the power conferred, the grant will be no protection, and the party doing the acts will be chargeable for a nuisance, either by indictment or at the suit of persons injured thereby, the same as though there had been no color of authority given for their exercise."

Wood on Nuisances, Sec. 596.

"DEFENDANTS' EXHIBIT No. 15."

TABLE OF ANALYSES AT 225 POUNDS.

	A	B	C	D	E	F	G
	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.
A	*2.7	*2.7	*2.7	*3.6	*2.9	.....	.....
B	*6.1	.....	.....	*65.1[2]	....	7.8	.....
C	*8.9	.....	.....	*82.0	.....	22.2	.....
D	*20	56	51.2	*91.4	*93.0	55.3	.....
E	*43.0	*75[2]	71.9	*92.7	*94.7[2]	73.5	.....
F	*65.8	82.5	82.1	*92.3	*93.9	87.0	.....
G	*80.1	89.6	87.9	*92.4	*95.4	92.3	.....
H	*86.7	*90.5[2]	*90.4[2]	*92.3[2]	*95.8	93.5	92.0
I	*90.0	*91.6[2]	*91.5	*90.7[2]	*94.2	93.5	*94.5[2]
J	*90.9	*91.7	92.3	*92.7	*96.7	*95.0	*94.7[2]
K		*91.5	*96.3	*97.7	*99.3	*99.1	*98.6
	50 per cent. Aq. No lime. No change of water.	50 per cent. Aq. No lime. No change of water.	50 per cent. Aq. No lime. 50 per cent. Aq. at 81 hours.	50 per cent. Aq. 1 per cent. lime. 50 per cent. Aq. at 85 hours.	100 per cent. Aq. 1 per cent. lime. 50 per cent. Aq. at 81 hours.	100 per cent. Aq. No lime. 100 per cent. Aq. at 85 hours.	100 per cent. Aq. 10 per cent. fat-acid. 100 per cent. Aq. at 85 hours.

Horizontal line shows where change of water occurred.
The star before the figure denotes that the sample was treated with sulphuric acid to remove any base.

TABULATION OF FACTS CONNECTED WITH JULY TESTS, OMITTED OR MISSTATED BY PROF. MORTON IN DEFENDANTS' EXHIBIT No. 15. (See Gamble, pages 1425 to 1429.)

	A No. 1.	B No. 2.	C No. 3.	**Lime.** 1 per cent. D No. 4.	**Lime.** 1 per cent. E No. 5.	F No. 6.	Fat Acid, 10 per cent. G, No. 7.
Rancidity of fat used	2.7	2.7	**2.7**	**3.6**	**2.9**		
Pounds of fat in charge, gross	6183	6191	**6407**	**6177**	**5232**	**5254**	5351
Pounds of fat decomposed at start				**617**	**523**		536
Pounds of fat to be decomposed, net	6183	6191	**6407**	**5560**	**4709**	**5254**	4815
Per cent. of water, gross	80	50	**45**	**50**	**103**	**102**	98
Per cent. of water, net	80	50	**45**	**55**	**114**	**102**	106
Pump strokes per minute	"10–1⅓" say 11.5	"12–14" say 13	"14 ?" say **14**	**14**	**14**	**14**	13
MIXTURE, or number of pump strokes to 100 lbs. fat, gross	100	107	**111**	**117**	**136**	**136**	123
MIXTURE, deducting fat decomposed at start	100	107	**111**	**128**	**151**	**136**	137
Decomposition at 8½ hours	90.4	91.6	**92.3**	**92.7**	**96.7**	**95**	94.7
Decomposition at 8½ hours, deducting fat decomposed at start	90.4	91.6	**92.3**	**82.7**	**86.7**	**95**	84.7

No. 151.
The City of Chicago
Taylor et al.
} p. 49

18TH ST.

LUMBER ST. APPROACH

CHICAGO RIVER

OFFICE

SCALES

STABLES

ROBT. LAW.

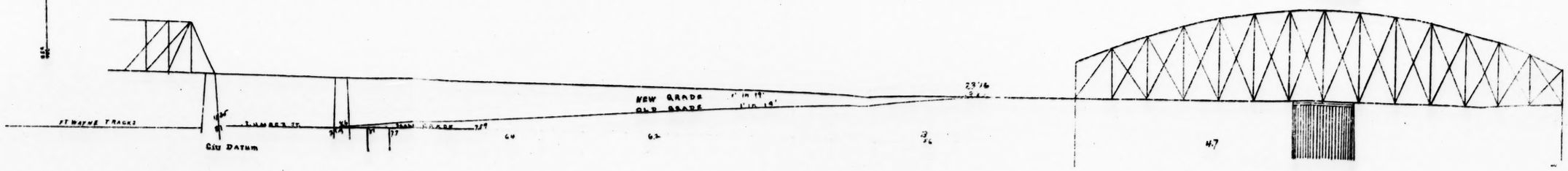
COAL YARD.

LUMBER ST.

HOUSE

HOUSE

STABEES

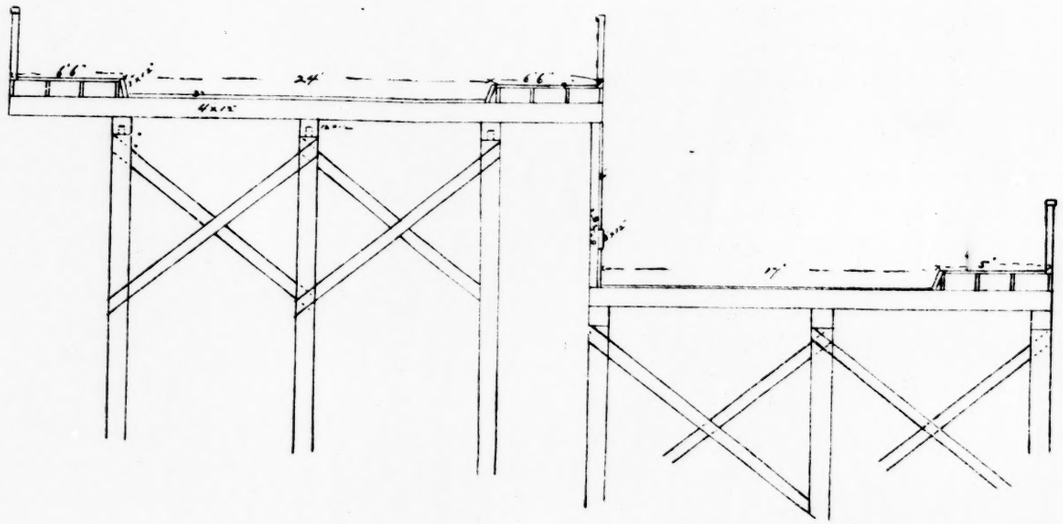


No 157
City of Chicago
v.
Taylor et al.
p. 85

Ex. 3

85

Section of Approach
18th St Viaduct



Scale 1/4" = 1'

No 1 St. Chicago & Dayton } p. 92

AV.

ST.

92

W. EIGHTEENTH ST.

STEWART

LUMBER

Rozz Irons Coal Yard

Diff Ex. 4

562

F. H. FISHER'S

HYDRAULIC MINING APP^{S}.

~~Fisher~~ ~~No. 286.~~ ~~vs.~~ ~~Craig et al.~~ ~~P. 278.~~

No 169. Haskin et al. vs. Fisher et al. } p. 562

Patented, Dec. 20. 1870.

No. 110222.

Fig. 2.

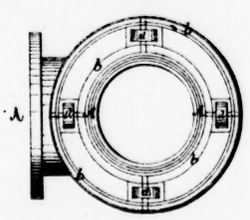


Fig. 1.

Exhibit No. 5.

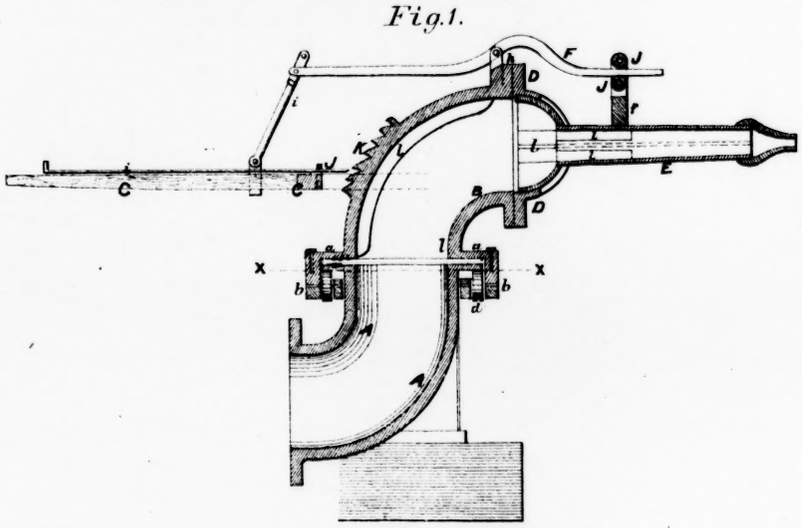


Fig. 3.

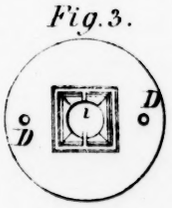


Fig. 4.

Witnesses:

A Bonnesen & Sof
D. S. Mabee

Inventor:

F. H. Fisher

per Munn & Co

Attorneys.

No. 1210.
The Southern Development Co.
v.
Silva
} p. 142

Westerly Branch of Main Tunnel

Easterly Branch of Main Tunnel

Winze No. 1

Bottom of Winze No. 1

Incline

82 ft level

No. 2

55 ft level

No. 3

Drill hole

Bottom of Winze No. 2

Sterling tunnel

Tunnel A — Mouth

Tunnel B — Mouth

Tunnel C — Mouth

Magnetic North
1 foot to 1 inch
L. A. Winkler
Surveyor

Tunnel — Mouth
Hole sunk 7 ft
Point of Location

No 1210.
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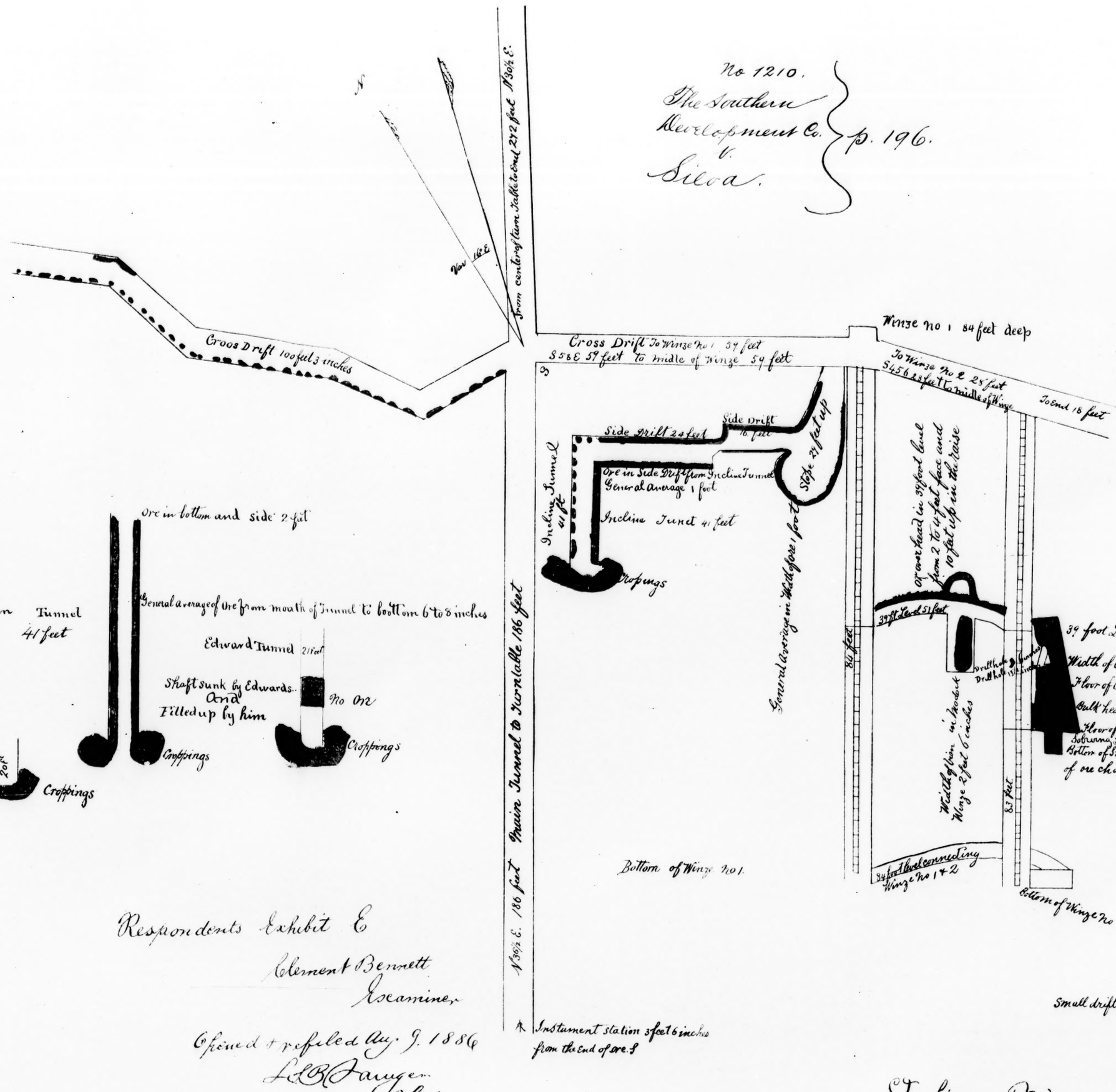
Silva.
} p. 196.



Respondents Exhibit E
Clement Bennett
Examiner.

Opened & refiled Aug. 9. 1886
L. L. Bragen
Clerk.

Sterling Mine
Surveyed
By. John Alexander
Surveyor
Nov. 1th A.D. 1884

RESPONDENT'S EXHIBIT P.

18. DELINQUENT.

Assessment Book of the Property of Inyo County for the Year 1884 *Assessed to all Known Owners or Claimants, and when Unknown to Unknown Owners or Claimants.*

When paid.	Tax-payer's name.	Road district.	School district.	Description of Property.	Mount Diablo Base and Meridian.			City or town lots.			Number of acres.	Value of real estate other than city and town lots.	Value of improvements thereon.	Value of city and town lots.	Value of improvements thereon.	Value of improvements on real estate in possession of lessee other than the owners of the real estate.	Value of personal property, exclusive of money.	Amount of money.	Deductions on account of mortgages, deeds of trust, contracts, or other obligations by which a debt is secured by lien on property.	Value of the interest of the mortgagee, trust deed, contract, or other obligation by which a debt is secured in the property affected thereby.	Value of the franchise, roadways, roadbed, rails, and rolling stock of railroads as apportioned to the county by the State Board of equalization.	Total value of all property after deductions (changes by the county board of equalization to be noted in red ink.)	Total value after equalization by the State board of equalization.	Special school tax.	Hospital poll tax.	Total tax.	Five per cent. added.	State poll tax.	Tax collected by the assessor.	Remarks.
				Real estate other than city and town lots, subdivision of sections, or metes and bounds; city and town lots; improvements; personal property.	Section.	T. No. S.	R. E.	Fraction.	Lot.	Block.																				
	Southern Development Company	6	Darwin	1,500 feet in the Sterling mine, situated in Coso mining district; mining and blacksmith's tools, $150	...	...	...	...	...	...	...	$1,000	$500	$	$	$		$150	$	$		$		$1,650	$	$	$	$55 63	$	$	$	Sold to the State.

STATE OF CALIFORNIA, }
County of Inyo, } *ss:*

I, W. L. Hunter, county clerk and *ex officio* county auditor of the county of Inyo, State of California, do hereby certify the foregoing and annexed to be a full, true, and correct copy of the assessment of the "Southern Development Company" of, in, and to the "Sterling mine" as the same appears on the delinquent assessment roll book for 1884, at page 18, of Inyo county, State of California, now on file in my office.

In witness whereof I have hereunto set my hand and affixed my official seal, at my office, in said county of Inyo, this 21st day of June, A. D. 1886.

[SEAL.]

W. L. HUNTER,
County Clerk and ex Officio County Auditor.

(Endorsed:) Respondent's Exhibit P. Clement Bennett, examiner. Opened and refiled Aug. 9, 1886. L. S. B. Sawyer, clerk.